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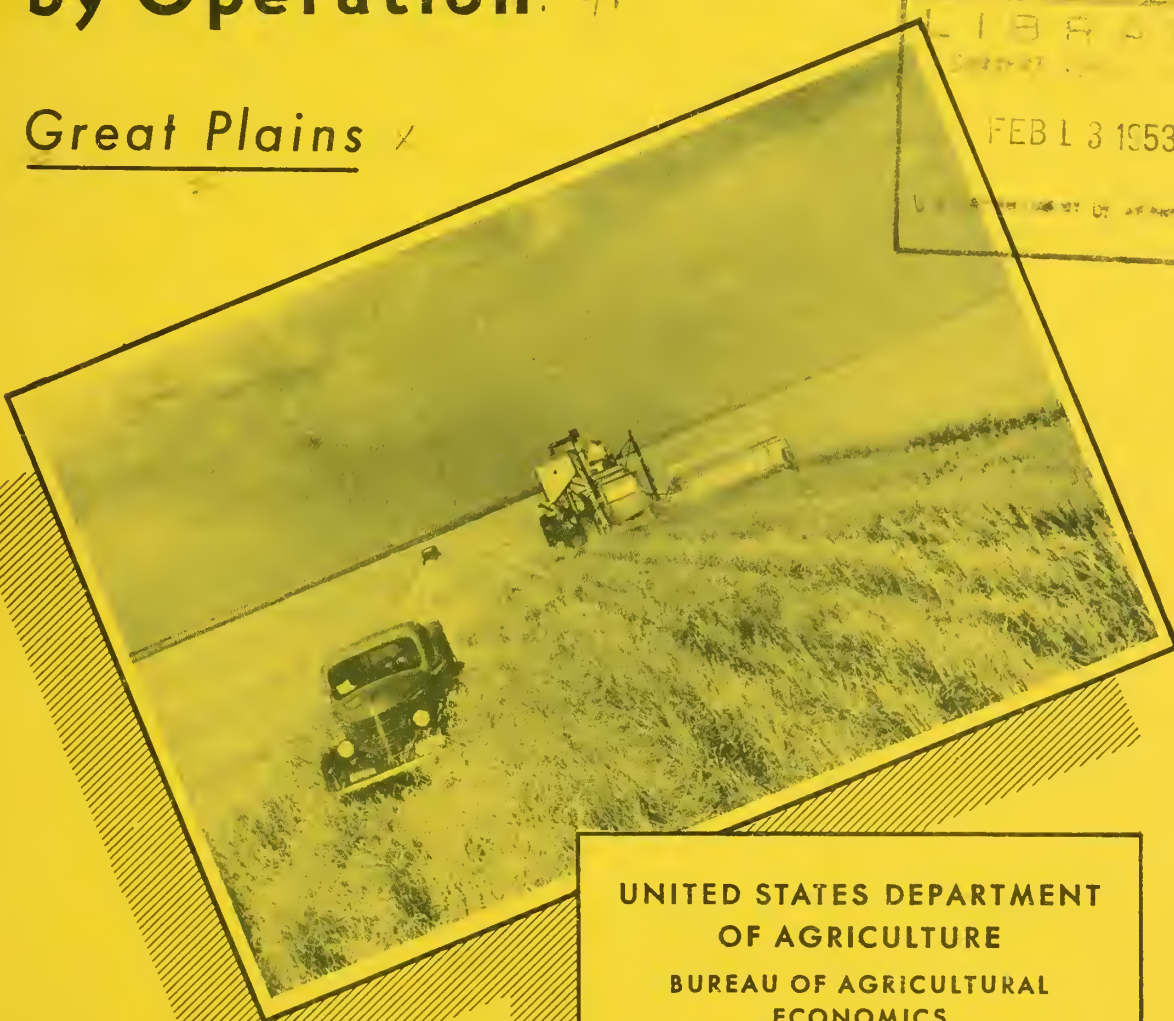
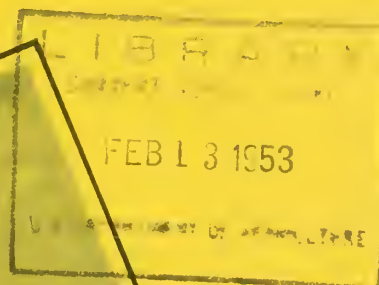
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CROP PRODUCTION PRACTICES;

Labor, Power, and Materials,
by Operation.

Great Plains

An aerial photograph showing a large farm vehicle, possibly a combine harvester, moving across a field. A smaller car is visible in the lower left of the frame. The photograph is tilted and has a diagonal hatched border.

UNITED STATES DEPARTMENT
OF AGRICULTURE
BUREAU OF AGRICULTURAL
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The following individuals on the staff of the Bureau of Agricultural Economics planned and directed the field surveys whereby the data released herein were obtained, and were responsible for summarizing and assembling the data: Wylie D. Goodsell, W. Herbert Brown, Herbert C. Fowler, I. Keith Harrison, Erling Hole, Edgar B. Hurd, Isabel Jenkins, S. W. Mendum, Stanley J. Provost, Christian A. Stokstad, and James Vermeer.

CROP PRODUCTION PRACTICES
Labor, Power and Materials, by Operation

Section 4 - GREAT PLAINS STATES

This publication presents information concerning production practices, man labor, power, machinery, and material requirements for several important crops in specified type-of-farming areas in the Great Plains States.

The information presented for each crop in each type-of-farming area was obtained from approximately 30 to 90 farmers through personal interviews. Field surveys were made in 1948, 1949, 1950, 1951, and 1952. For the most part, information obtained was for the crop last harvested. As a result, data in the various sections of this publication cover specified crops harvested in 1947 through 1952. Surveys have been made for crops in other areas. Information relating to these crops is to be released as rapidly as it can be summarized.

Additional surveys are already planned. Some of these will cover additional areas and probably some different crops. Also, it is planned to repeat surveys in many of these areas to keep current as to changing practices and methods of production.

Farms included in the survey were selected through accepted random sampling methods from those growing the crops on a commercial basis in the specified area. In some instances, production of a particular crop was confined to a comparatively small area or to a number of small areas. Sometimes a crop was grown by practically all farmers in the type-of-farming area. In each instance, an attempt was made to obtain a cross-section of the commercial producers in the type-of-farming area.

Although the number of farms surveyed for each crop does not appear to be large in most cases, enough farms were surveyed so that reasonably stable averages for the common and important items were obtained. It was practically impossible to obtain statistically reliable estimates for many items on crops for which practices varied widely. This was particularly true when new practices and materials had been recently introduced, and had not as yet been adopted by many producers.

For example, in some areas the use of commercial fertilizers has been a standard practice for many years in the production of some crops. However, use of fertilizers in production of other crops in certain areas is still in the experimental stage, and the number of farmers using fertilizers and the kinds and amounts of fertilizer used vary widely.

Use of weed sprays is becoming common in many areas. Several new kinds of insecticides and fungicides are used and the method of applying them and the kind of equipment used vary widely. A good deal of spraying and dusting is done with custom or contract outfits. Much of it is done with wholly or partially farmer-made equipment. Some of the material is applied by airplane, particularly in later stages in the

growth of the crop. These recent innovations in materials used and methods of application cause wide variation in materials used and practices followed by farmers.

In each instance, the farmer was asked to enumerate operations in the sequence in which they were performed. Kind and size of machine and tractor used and the number of men and the time required per acre were recorded for each operation. In the case of practices that were repeated, such as cultivating and irrigating, and consistent or significant differences in time requirements between practices were noted, the pertinent detail is listed separately in the summary tables.

An attempt was made to account for all labor, power, machinery, contract or custom work, and material used in producing and harvesting the crops. In summarizing the data, certain items were combined unless it was apparent that the material or practice was increasing in importance and probably would become largely universal. For example, the use of pick-up balers, commercial fertilizers, and some pesticides appeared to be increasing in importance. These were listed and the percentage of the acreage covered was given so that at a later date changes in practices may be estimated.

Miscellaneous sizes of equipment were not listed in the final summaries but time requirements, acreage covered, and pertinent data for such operations were included with operations of important sizes of the same kind of equipment. For example, for a given crop in a certain area, 65 percent of the plowing was done with 2-14 inch plows, 30 percent with 1-16 inch plows, 3 percent with 1-18 inch plows, and 2 percent with 1-14 inch plows. In this case, acreages plowed with 1-14 and 1-18 inch plows are combined with the acreage plowed with 1-16 inch plows, and the rate of plowing carried in the summary for one-bottom plows is that for 1-16 inch plows.

In some instances it was impossible to obtain performance rates for custom machines from the persons interviewed. For this reason the rate used in the summaries for most custom jobs is the average rate given by farm operators who use the same sized-machines and crews. Custom work performed with several sizes of equipment, of which only one or two accounted for a sizable portion of the acreage, is listed with the more common size or sizes of equipment. Wherever practical local terminology was used in referring to practices followed, and machinery and materials used.

All work performed, regardless of who performed the service, and all materials used are included in the summary. Unless otherwise specified, a tractor was the source of power. Performance rates are those given for actual field operations under usual conditions. Time required in extensive repairs, break-downs, and general farm overhead is not included. In the final summarization time, requirements for each operation were multiplied by a specified factor to account for direct man-labor spent in lubricating, checking and adjusting machines,

I. FRUIT, TRUCK, AND MIXED FARMING

- A. FRUIT AND MIXED FARMING
 - A 1. Central Washington. A 2. Southern Oregon. A 3. Sacramento Valley.
 - A 4. San Joaquin Valley. A 5. Colorado West Slope.
 - A 6. Ozark Plateau, Mo.—Ark.—Okla. A 7. Shenandoah—Cumberland Valleys.
- B. FRUIT, TRUCK, AND MIXED FARMING
 - B 1. Central California Coast. B 2. Southern California and Southwestern Arizona.
 - B 3. Lower Rio Grande Valley. B 4. Central Florida.
 - B 5. Eastern Shore of Lake Michigan. B 6. Southern Shore of Lake Ontario.
 - B 7. Southern Shore of Lake Erie.
- C. TRUCK AND MIXED FARMING
 - C 1. Atlantic Sandy Coastal Plain. C 2. Gulf Coast.
- D. TRUCK
 - D 1. Southern Florida.

II. RANGE LIVESTOCK

- A. SEASONAL GRAZING—MIGRATORY
 - A 1. Great Basin. A 2. Wyoming Basin. A 3. Colorado Plateau.
 - A 4. Columbia Basin—Blue Mountains. A 5. Snake River.
 - A 6. Sierra Foothills—Coast Range.
- B. SEASONAL GRAZING—NONMIGRATORY
 - B 1. Northern Great Plains. B 2. Southern High Plains.
 - B 3. Nebraska Sandhills Stock Farms. B 4. Osage—Flint Hills Stock Farms.
 - B 5. Arbuckle Mountain, Oklahoma Stock Farms. B 6. North Texas Grazing Area.
 - B 7. Canadian River Breaks. B 8. Central Plains Stock Farms.
- C. UPLAND SUMMER GRAZING
 - C 1. Sierra and Southern Cascade Mountains.
 - C 2. Northern Rocky Mountains and Associated Ranges.
 - C 3. Southern Rocky Mountains. C 4. Middle Rocky Mountains.
- D. YEAR - LONG GRAZING
 - D 1. Southwestern Semidesert, Migratory.
 - D 2. Southwestern Semidesert, Nonmigratory.
 - D 3. Edwards Plateau. D 4. Rio Grande Plains, Texas.

III. WHEAT AND SMALL GRAINS

- A. SPECIALIZED WHEAT
 - A 1. Columbia River Basin, Western Portion. A 2. East of Missouri River.
 - A 3. Central North Dakota. A 4. Central Plains.
- B. WHEAT AND PEAS
 - B 1. Columbia River Basin, Eastern Portion.
- C. WHEAT AND RANGE LIVESTOCK
 - C 1. Triangle—Judith Basin, Montana. C 2. Northern Plains.
 - C 3. Central High Plains. C 4. Red Hills. C 5. Southern Montana.
- D. WHEAT, GRAIN SORGHUMS, AND RANGE LIVESTOCK
 - D 1. Southern High Plains.
- E. WHEAT AND GENERAL FARMING
 - E 1. Southern Idaho. E 2. Red River Valley.
 - E 3. South Dakota—North Dakota, Spring Wheat—Corn Transition.
 - E 4. Central Kansas—Oklahoma.
- F. SMALL GRAINS
 - F 1. California Valley Borders.

IV. DAIRY

- A. SPECIALIZED DAIRY
 - A 1. North Pacific Coast. A 2. Eastern Wisconsin—Northeastern Illinois.
 - A 3. Central Northeast. A 4. Boise Valley and Star Valley.
 - A 5. San Joaquin Valley. A 6. Los Angeles Milkshed.
- B. DAIRY AND LIVESTOCK
 - B 1. Minnesota Cut-over Fringe. B 2. Southeast Minnesota—West Central Wisconsin.
- C. DAIRY, HAY, AND POTATOES
 - C 1. Lake States Cut-over, Small Scale.
- D. DAIRY AND CASH CROPS
 - D 1. East Central Michigan. D 2. Western New York.
- E. DAIRY, POULTRY, AND MIXED FARMING
 - E 1. Puget Sound—Willamette Valley. E 2. Southern New England.
 - E 3. Hudson River Valley. E 4. Central Maine.
- F. DAIRY AND GENERAL FARMING
 - F 1. Central Wisconsin. F 2. Central Pennsylvania.
 - F 3. Northern Piedmont. F 4. Lake Erie Border.
 - F 5. Northern New England, Small Scale.
 - F 6. Allegheny Plateau, Pennsylvania, Small Scale.

V. FEED GRAINS AND

- A. CATTLE FEEDING AND
 - A 1. Central Missouri F
- B. CASH CORN, OATS, AND
 - B 1. Central Iowa. B
- C. HOGS AND SOFT WINTER
 - C 1. Central Indiana—Sc
 - C 2. Wabash and Lower
- D. LIVESTOCK, DAIRY, SOY
 - D 1. Northwestern Ohio
- E. HOGS AND DAIRY
 - E 1. N. E. Iowa—N. W. D
- F. LIVESTOCK AND CASH C
 - F 1. Northwestern Corn
 - F 2. Southwestern Corn
 - F 3. Western Corn Belt
 - F 5. Northern Iowa—Sou
- G. LIVESTOCK, CASH GRAI
 - G 1. Western Missouri—
- H. LIVESTOCK AND PASTUR
 - H 1. Southern Iowa—Nor
 - H 2. Northwestern India

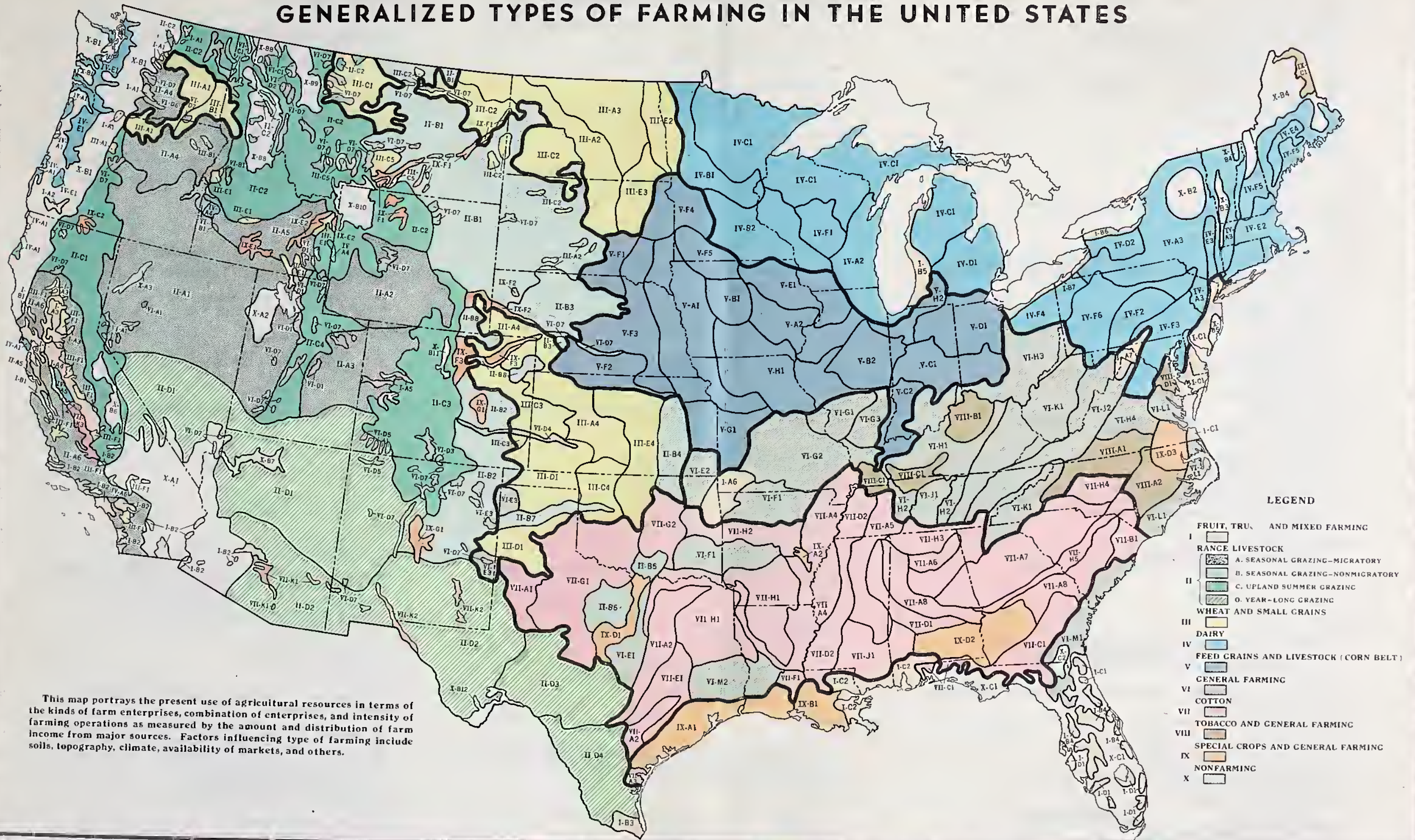
VI. GENERAL FARMING

- A. DAIRY AND LIVESTOCK
 - A 1. Western Nevada.
- B. DAIRY, HAY, AND SUGAR
 - B 1. Lower Snake River
- C. DAIRY AND RANGE LIVE
 - C 1. Northern Rocky Mo
- D. LIVESTOCK AND SPECIA
 - D 1. Central Utah and So
 - D 3. San Luis Valley.
 - D 6. Southern Yakima Va
- E. LIVESTOCK AND CASH G
 - E 1. Grand Prairie of To
 - E 2. Southeast Kansas—
 - E 3. Southern High Plain
- F. LIVESTOCK, TRUCK, AN
 - F 1. Southern Ozark and
- G. DAIRY, LIVESTOCK, AND
 - G 1. St. Louis Milkshed
 - G 3. Southern Illinois G
- H. LIVESTOCK AND TOBAC
 - H 1. Knobs and Coal Fie
 - H 2. Highland Rim of Te
 - H 4. Central Virginia Pi
- J. LIVESTOCK AND DAIRY
 - J 1. Central Basin of Te
- K. LIVESTOCK, FRUIT, AND
 - K 1. Appalachian Mounta
- L. TRUCK, TOBACCO, AND
 - L 1. Tidewater Virginia
- M. FOREST PRODUCTS, TRU
 - M 1. Atlantic and Gulf Co
 - M 2. Texas—Louisiana C

VII. COTTON

- A. SPECIALIZED COTTON
 - A 1. Southern High Plain
 - A 3. Corpus Christi.
 - A 5. Mississippi and Ter
 - A 6. Sand Mountain, Ala
 - A 8. Upper Coastal Plain
- B. COTTON AND TOBACCO
 - B 1. Central Coastal Pla
- C. COTTON, TOBACCO, HOG
 - C 1. Lower Coastal Plain

GENERALIZED TYPES OF FARMING IN THE UNITED STATES



CLASSIFICATION AND REGIONALIZATION OF TYPES OF FARMING IN THE UNITED STATES

I. FRUIT, TRUCK, AND MIXED FARMING

- A. FRUIT AND MIXED FARMING
 - A 1. Central Washington.
 - A 2. Southern Oregon.
 - A 3. Sacramento Valley.
 - A 4. San Joaquin Valley.
 - A 5. Colorado West Slope.
 - A 6. Ozark Plateau, Mo.—Ark.—Okla.
 - A 7. Shenandoah—Cumberland Valleys.
- B. FRUIT, TRUCK, AND MIXED FARMING
 - B 1. Central California Coast.
 - B 2. Southern California and Southwestern Arizona.
 - B 3. Lower Rio Grande Valley.
 - B 4. Central Florida.
 - B 5. Eastern Shore of Lake Michigan.
 - B 6. Southern Shore of Lake Ontario.
 - B 7. Southern Shore of Lake Erie.
- C. TRUCK AND MIXED FARMING
 - C 1. Atlantic Sandy Coastal Plain.
 - C 2. Gulf Coast.
- D. TRUCK
 - D 1. Southern Florida.

II. RANGE LIVESTOCK

- A. SEASONAL GRAZING—MIGRATORY
 - A 1. Great Basin.
 - A 2. Wyoming Basin.
 - A 3. Colorado Plateau.
 - A 4. Columbia Basin—Blue Mountains.
 - A 5. Snake River.
 - A 6. Sierra Foothills—Coast Range.
- B. SEASONAL GRAZING—NGNMIGRATORY
 - B 1. Northern Great Plains.
 - B 2. Southern High Plains.
 - B 3. Nebraska Sandhills Stock Farms.
 - B 4. Osage—Flint Hills Stock Farms.
 - B 5. Arbuckle Mountain, Oklahoma Stock Farms.
 - B 6. North Texas Grazing Area.
 - B 7. Canadian River Breaks.
 - B 8. Central Plains Stock Farms.
- C. UPLAND SUMMER GRAZING
 - C 1. Sierra and Southern Cascade Mountains.
 - C 2. Northern Rocky Mountains and Associated Ranges.
 - C 3. Southern Rocky Mountains.
 - C 4. Middle Rocky Mountains.
- D. YEAR - LONG GRAZING
 - D 1. Southwestern Semidesert, Migratory.
 - D 2. Southwestern Semidesert, Nonmigratory.
 - D 3. Edwards Plateau.
 - D 4. Rio Grande Plains, Texas.

III. WHEAT AND SMALL GRAINS

- A. SPECIALIZED WHEAT
 - A 1. Columbia River Basin, Western Portion.
 - A 2. East of Missouri River.
 - A 3. Central North Dakota.
 - A 4. Central Plains.
- B. WHEAT AND PEAS
 - B 1. Columbia River Basin, Eastern Portion.
- C. WHEAT AND RANGE LIVESTOCK
 - C 1. Triangle—Judith Basin, Montana.
 - C 2. Northern Plains.
 - C 3. Central High Plains.
 - C 4. Red Hills.
 - C 5. Southern Montana.
- D. WHEAT, GRAIN SORGHUMS, AND RANGE LIVESTOCK
 - D 1. Southern High Plains.
- E. WHEAT AND GENERAL FARMING
 - E 1. Southern Idaho.
 - E 2. Red River Valley.
 - E 3. South Dakota—North Dakota, Spring Wheat—Corn Transition.
 - E 4. Central Kansas—Oklahoma.
- F. SMALL GRAINS
 - F 1. California Valley Borders.

IV. DAIRY

- A. SPECIALIZED DAIRY
 - A 1. North Pacific Coast.
 - A 2. Eastern Wisconsin—Northeastern Illinois.
 - A 3. Central Northeast.
 - A 4. Boise Valley and Star Valley.
 - A 5. San Joaquin Valley.
 - A 6. Los Angeles Milkshed.
- B. DAIRY AND LIVESTOCK
 - B 1. Minnesota Cut-over Fringe.
 - B 2. Southeast Minnesota—West Central Wisconsin.
- C. DAIRY, HAY, AND POTATOES
 - C 1. Lake States Cut-over, Small Scale.
- D. DAIRY AND CASH CROPS
 - D 1. East Central Michigan.
 - D 2. Western New York.
- E. DAIRY, POULTRY, AND MIXED FARMING
 - E 1. Puget Sound—Willamette Valley.
 - E 2. Southern New England.
 - E 3. Hudson River Valley.
 - E 4. Central Maine.
- F. DAIRY AND GENERAL FARMING
 - F 1. Central Wisconsin.
 - F 2. Central Pennsylvania.
 - F 3. Northern Piedmont.
 - F 4. Lake Erie Border.
 - F 5. Northern New England, Small Scale.
 - F 6. Allegheny Plateau, Pennsylvania, Small Scale.

V. FEED GRAINS AND LIVESTOCK (CORN BELT)

- A. CATTLE FEEDING AND HOGS
 - A 1. Central Missouri River Valley.
 - A 2. Eastern Iowa—Western Illinois.
- B. CASH CORN, OATS, AND SOYBEANS
 - B 1. Central Iowa.
 - B 2. East Central Illinois.
- C. HOGS AND SOFT WINTER WHEAT
 - C 1. Central Indiana—Southwestern Ohio.
 - C 2. Wabash and Lower Ohio River Valleys.
- D. LIVESTOCK, DAIRY, SOYBEANS, AND CASH GRAIN
 - D 1. Northwestern Ohio—Northeastern Indiana.
- E. HOGS AND DAIRY
 - E 1. N. E. Iowa—N. W. Illinois—S. W. Wisconsin.
- F. LIVESTOCK AND CASH GRAIN
 - F 1. Northwestern Corn—Livestock Transition.
 - F 2. Southwestern Corn—Hard Winter Wheat Transition.
 - F 3. Western Corn Belt Fringe.
 - F 4. Northwestern Corn Belt Fringe.
 - F 5. Northern Iowa—Southwestern Minnesota.
- G. LIVESTOCK, CASH GRAIN, AND DAIRY
 - G 1. Western Missouri—Eastern Kansas.
- H. LIVESTOCK AND PASTURE
 - H 1. Southern Iowa—Northern Missouri—West Central Illinois.
 - H 2. Northwestern Indiana—Southwestern Michigan.

VI. GENERAL FARMING

- A. DAIRY AND LIVESTOCK FEEDING—IRRIGATED
 - A 1. Western Nevada.
- B. DAIRY, HAY, AND SUGAR BEETS—IRRIGATED
 - B 1. Lower Snake River
- C. DAIRY AND RANGE LIVESTOCK—SMALL SCALE
 - C 1. Northern Rocky Mountain Cut-over.
- D. LIVESTOCK AND SPECIAL CROPS—IRRIGATED
 - D 1. Central Utah and Southeastern Idaho.
 - D 2. Western Montana.
 - D 3. San Luis Valley.
 - D 4. Upper Arkansas Valley.
 - D 5. San Juan Basin.
 - D 6. Southern Yakima Valley.
 - D 7. Other Irrigated Valleys.
- E. LIVESTOCK AND CASH GRAIN
 - E 1. Grand Prairie of Texas.
 - E 2. Southeast Kansas—Northeast Oklahoma.
 - E 3. Southern High Plains, Texas—New Mexico.
- F. LIVESTOCK, TRUCK, AND COTTON—SMALL SCALE
 - F 1. Southern Ozark and Ouachita Mountains.
- G. DAIRY, LIVESTOCK, AND POULTRY
 - G 1. St. Louis Milkshed.
 - G 2. Ozark Mountains and Border.
 - G 3. Southern Illinois Gray Lands.
- H. LIVESTOCK AND TOBACCO
 - H 1. Knobs and Coal Fields, Indiana—Kentucky.
 - H 2. Highland Rim of Tennessee.
 - H 3. Upper Ohio River Valley and Hills.
 - H 4. Central Virginia Piedmont.
- J. LIVESTOCK AND DAIRY
 - J 1. Central Basin of Tennessee.
 - J 2. Great Appalachian Valley.
- K. LIVESTOCK, FRUIT, AND TOBACCO—SMALL SCALE
 - K 1. Appalachian Mountains.
- L. TRUCK, TOBACCO, AND LIVESTOCK
 - L 1. Tidewater Virginia—North Carolina.
- M. FOREST PRODUCTS, TRUCK, AND COTTON—SMALL SCALE
 - M 1. Atlantic and Gulf Coast Flatwoods.
 - M 2. Texas—Louisiana Cut-over.

VII. COTTON

- A. SPECIALIZED COTTON
 - A 1. Southern High Plains.
 - A 2. Texas Black Waxy Prairies.
 - A 3. Corpus Christi.
 - A 4. Deltas of Mississippi River and Tributaries.
 - A 5. Mississippi and Tennessee Clay Hills and Sandy Loams.
 - A 6. Sand Mountain, Alabama.
 - A 7. Southern Piedmont.
 - A 8. Upper Coastal Plains.
- B. COTTON AND TOBACCO
 - B 1. Central Coastal Plains, North Carolina—South Carolina.
- C. COTTON, TOBACCO, HOGS, AND PEANUTS
 - C 1. Lower Coastal Plains, Georgia—Florida.

VII. COTTON (CONTINUED)

- D. COTTON AND LIVESTOCK
 - D 1. Alabama—Mississippi Black Belt.
 - D 2. Mississippi—Tennessee—Louisiana Silt Loams.
- E. COTTON AND RANGE LIVESTOCK
 - E 1. Post Oak Strip of Texas.
- F. COTTON AND SUGARCANE
 - F 1. Central Louisiana.
- G. COTTON AND WHEAT
 - G 1. Rolling Plains, Texas—Oklahoma.
 - G 2. Mixed Prairies and Cross Timbers of Oklahoma.
- H. COTTON AND GENERAL FARMING
 - H 1. Western Sandy Coastal Plains, Texas—Arkansas—Louisiana—Oklahoma.
 - H 2. Arkansas River Valleys and Uplands.
 - H 3. Limestone Valleys and Uplands, Tennessee—Georgia—Alabama.
 - H 4. Piedmont of Central North Carolina.
 - H 5. Sand Hills of the Carolinas and Georgia.
- J. COTTON AND FOREST PRODUCTS
 - J 1. Gulf Coast Piney Woods.
- K. IRRIGATED COTTON AND ALFALFA
 - K 1. Southern Arizona.
 - K 2. Rio Grande—Pecos.
 - K 3. San Joaquin Valley.

VIII. TOBACCO AND GENERAL FARMING

- A. FLUE-CURED
 - A 1. Piedmont, Virginia—North Carolina.
 - A 2. Central Coastal Plains, North Carolina.
- B. BURLEY
 - B 1. Central Kentucky Bluegrass.
- C. DARK
 - C 1. Pennyroyal—Purchase, Kentucky—Tennessee.
- D. SOUTHERN MARYLAND
 - D 1. Southern Maryland.

IX. SPECIAL CROPS AND GENERAL FARMING

- A. RICE
 - A 1. Gulf Coastal Prairies, Texas—Louisiana.
 - A 2. Arkansas Prairies.
- B. SUGARCANE
 - B 1. Lower Louisiana Delta.
- C. POTATOES
 - C 1. Aroostook County, Maine.
 - C 2. Klamath Basin, Oregon—California.
- D. PEANUTS
 - D 1. Cross Timbers, Texas.
 - D 2. Southern Coastal Plains, Oeorgia—Alabama.
 - D 3. Northern Coastal Plains, Virginia—North Carolina.
- E. POTATOES, DRY BEANS, SUGAR BEETS, AND LIVESTOCK—IRRIGATED
 - E 1. Middle Snake River.
 - E 2. Upper Snake River.
- F. SUGAR BEETS, DRY BEANS, AND LIVESTOCK—IRRIGATED
 - F 1. Upper Yellowstone River and Wyoming.
 - F 2. North Platte River.
 - F 3. Northeastern Colorado.
- G. DRY BEANS—NONIRRIGATED
 - G 1. Colorado—New Mexico.

X. NONFARMING

- A. DESERTS
 - A 1. Mohave Desert.
 - A 2. Utah Salt Flats.
 - A 3. Black Rock Desert.
- B. MOUNTAINS AND FORESTS
 - B 1. Cascade Mountains and Associated Ranges.
 - B 2. Adirondack Mountains.
 - B 3. Green Mountains of Vermont.
 - B 4. Northern Maine and New Hampshire Woods.
 - B 5. New Jersey Pines.
 - B 6. Yosemite, General Grant, and Sequoia National Parks and Vicinity.
 - B 7. Grand Canyon National Park and Vicinity.
 - B 8. Northwestern Rocky Mountain Area.
 - B 9. Glacier National Park and Vicinity.
 - B10. Yellowstone National Park and Vicinity.
 - B11. Rocky Mountain National Park and Vicinity.
 - B12. Big Bend National Park and Vicinity.
- C. LOWLANDS AND EVERGLADES
 - C 1. Florida Everglades and Flatwoods.
 - C 2. Okefenokee Swamp.

making minor repairs, loading or filling machines such as drills, planters, dusters, fertilizer spreaders et cetera, and moving from field to field.

Immediately following this discussion is a map which identifies or locates each type-of-farming area. The identification of type-of-farming areas given on the map corresponds with the identification of the type-of-farming areas listed in the tables that follow, showing crops, areas and the year to which the data apply.

Following the map is a listing of the crops for which data were obtained in the Great Plains States, the year to which the data pertain, and the type-of-farming area or portion of the area in which the survey was made. Data obtained for the crop produced in part of the type-of-farming area are so specified.

Information similar to that presented in this publication is given in other publications for: (1) the Northeast, (2) the Corn Belt and Lake States, (3) the Appalachian, Southeast and Mississippi Delta, and (4) Mountain and Pacific States. A list of States included in each type-of-farming region, together with the information available for each region, appears at the end of this publication.

Requests for this information have come from many sources. One of the primary uses of the data has been to enable personnel in the Bureau of Agricultural Economics to provide the Federal Crop Insurance Corporation with estimates of farmers' investments in insured crops by stages in the growth of the crop. These estimates are revised each year as practices and cost rates change.

Extensive use is made of the data in many research projects, particularly in the research work relating to costs and returns in the Bureau of Agricultural Economics. Wide use of the data also is made by staffs in the Land-Grant Colleges, by other agencies in the Federal Government, and by private organizations and individuals. Staffs in the Land-Grant Colleges in many States contributed data, made helpful suggestions, and assisted in many other ways.

Crops and Type-of-Farming Areas for which Cropping-Practice Data
are Available in Section 4

Great Plains

Crop	Type-of- farming area	Crop year	Page	Crop	Type-of- farming area	Crop year	Page
Alfalfa:							
Irrigated	IX-F2	1951:	6	Corn silage:			
Nonirrigated	VI-E1	1949:	8	Nonirrigated	III-E3	1949:	56
					V-F4	1949:	58
Barley:				Cotton:			
Irrigated	IX-F2	1951:	10	Irrigated	VII-A1	1951:	60
Nonirrigated	III-A3	1947:	12	Nonirrigated	VII-A1	1951:	62
	III-C2	1950:	14		VII-A2	1951:	64
	III-E2	1950:	16				
	III-E3	1949:	18	Flax:			
	V-A1	1949:	20	Nonirrigated	II-B1	1950:	66
	V-F4	1949:	22		III-A2	1950:	68
	VI-E1	1949:	24		III-A3	1947:	70
	VII-A2	1949:	26		III-C2	1950:	72
					III-E3	1949:	74
Beans, dry:					V-A1	1949:	76
Irrigated	IX-F2	1951:	28		V-F4	1949:	78
				Grain sorghum:			
Broomcorn:				Nonirrigated	II-B4	1949:	80
Nonirrigated	VII-G2	1949:	30		III-D1	1948:	82
					V-A1	1949:	84
Corn, grain:					V-G1	1949:	86
Irrigated	IX-F2	1951:	32		VI-E1	1949:	88
Nonirrigated	II-B4	1949:	34		VI-E2	1949:	90
	III-E3	1949:	36		VII-A2	1949:	92
	V-A1	1949:	38		VII-G2	1949:	94
	V-A1						
	(Nebr.)	1948:	40	Hairy vetch seed:			
	V-F2	1950:	42	Nonirrigated	VI-E1	1949:	96
	V-F4	1949:	44		VII-A2	1949:	98
	V-G1	1949:	46				
	VI-E1	1949:	48	Hubam clover seed:			
	VI-E2	1949:	50	Nonirrigated	VI-E1	1949:	100
	VII-A2	1949:	52		VII-A2	1949:	102
	VII-G2	1949:	54	Madrid clover seed:			
				Nonirrigated	VII-A2	1949:	104

Continued

Crops and Type-of-Farming Areas for which Cropping-Practice Data
are Available in Section 4 - Continued

Great Plains

Crop	:Type-of-:			Crop	:Type-of-:		
	:farming	:Crop:	:Page:		:farming	:Crop:	:Page:
	: area	:year:			: area	:year:	
Oats:				Wheat, spring:			
Irrigated	IX-F2	:1951:	106	Nonirrigated			
Nonirrigated	II-B4	:1950:	108	Cont. cropping..	II-B1	:1950:	156
	III-A3	:1950:	110		III-A2	:1950:	158
	III-C2	:1950:	112		III-A3	:1947:	160
	III-E2	:1950:	114		III-C2	:1950:	162
	III-E3	:1949:	116		III-E3	:1949:	164
	V-A1	:1949:	118		V-F1	:1950:	166
	V-F4	:1949:	120		V-F4	:1949:	168
	V-G1	:1949:	122				
	VI-E1	:1949:	124	Summer fallow..	II-B1	:1950:	170
	VI-E2	:1950:	126		III-A2	:1950:	172
	VII-A2	:1949:	128		III-A3	:1947:	174
	VII-G2	:1949:	130		III-C2	:1950:	176
Peanuts:				After corn	II-B1	:1950:	178
Nonirrigated	VI-E1	:1949:	132		III-A2	:1950:	180
	VII-A2	:1949:	134		III-C2	:1950:	182
	VII-G2	:1949:	136				
				Wheat, winter:			
Rye:				Nonirrigated			
Nonirrigated	III-A3	:1950:	138	Cont. cropping..	II-B4	:1950:	184
	III-C2	:1950:	140		III-A4	:1952:	186
	III-E2	:1950:	142		III-D1	:1948:	188
	III-E3	:1949:	144		III-E4	:1950:	190
					V-A1		
Soybeans:					(Nebr.)	:1949:	192
Nonirrigated	V-A1	:1949:	146		V-F2	:1950:	194
	V-F4	:1949:	148		V-G1	:1949:	196
	V-G1	:1949:	150		VI-E1	:1949:	198
	VI-E2	:1949:	152		VI-E2	:1950:	200
					VII-A2	:1949:	202
					VII-G2	:1949:	204
Sugar beets:				Summer fallow..	III-A4	:1952:	206
Irrigated	IX-F2	:1951:	154		III-D1	:1948:	208
					V-F2	:1950:	210

ALFALFA HAY (IRRIGATED): RESOURCES USED IN PRODUCTION,
AREA IX-F2, 1951

The data presented here are based on a survey made in 1951 of approximately 55 farms producing alfalfa hay under irrigation in 1951, in southeastern Wyoming and west central Nebraska. These farms are located in type-of-farming area IX-F2, a specialized crop and general farming area along the North Platte and Laramie Rivers. The particular farms surveyed are diversified, producing livestock, hay, corn, small grains, and specialized crops.

Nearly all of the alfalfa in this area is seeded with a nurse crop. Farmers reported that hay seeding usually lasted 4 years. As a result, one-half of the man labor, power and machinery, and materials used jointly in establishing the hay seeding and the nurse crop is charged to the hay crop. All additional materials, man labor, and power and machinery used directly in establishing the hay crop also are prorated to the annual charges for the hay crop according to the estimated life of the seeding.

The farms averaged about 214 acres per farm. Cropland comprised about 147 acres. In 1951, about 31 acres were in alfalfa cut for hay, and the average yield was approximately 2.9 tons per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of the tractors ranged from 14 to 26. There were two common sizes: 19 and 26.

Materials used and contract work hired, 1951

MATERIALS USED

Item	: Unit	: Quantity per acre	: Price per unit	: Cost per acre	: Average Acreage covered	: Average cost per acre
		: Number	: Dollars	: Dollars	: Percent	: Dollars
Establish seeding, total:						
Seed	: Lb.	: 12	: 0.55	: 6.60	: 100	: 6.60
Total for establishment						6.60
Annual charge to alfalfa	: ---	: ---	: ---	: ---	: ---	: 1.65
Mixed fertilizer (12-24-0)	: Cwt.	: 2.00	: 4.15	: 8.30	: 4	: .33
Nitrate fertilizer (33-0-0)	: Cwt.	: 1.00	: 4.25	: 4.25	: 2	: .08
Phosphate fertilizer(0-42-0)	: Cwt.	: 1.30	: 3.50	: 4.55	: 49	: 2.23
Dust	: Lb.	: 30	: .04	: 1.20	: 7	: .08
Water	: Acre	: 1.0	: 1.90	: 1.90	: 100	: 1.90
Baling twine	: Lb.	: 10.2	: .30	: 3.06	: 16	: .49
Total annual charge						6.76

CONTRACT WORK HIRED

Baling	: Acre	: $\frac{1}{3}$ 3.0	: 4.25	: 12.75	: 16	: 2.04
Total contract work						2.04

$\frac{1}{3}$ One acre times average number of cuttings.

Man labor, power, and machinery used by operation in producing and harvesting alfalfa hay, irrigated, area IX-F2, southeastern Wyoming and west central Nebraska, 1951

Operation	Size	Time per acre:			Average time per	
	of	Times	once over	Acreage	acre - all farms	
	equipment	over	Man	Power	covered	Man : Tractor
	No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Establish seeding, total	---	---	---	1/	5.76	1.60
Establish seeding, annual:	---	---	---	2/	1.44	.40
Ditch	---	1.2	0.42	.25	.79	.24
Ditch by hand	---	1.3	.32	---	13	---
Fertilize, spreader	10-foot	1.0	.47	.41	55	.23
Irrigate	---	3.9	3.45	---	100	---
Dust	24-foot	1.0	.27	.25	7	.02
Total preharvest	:	:	:	:	15.63	.89
Mow	7-foot	3.0	.52	.47	100	1.41
Rake, side-delivery	---	3.0	.46	.42	100	1.26
Bunch, dump-rake	---	3.0	.54	.49	12	.18
Haul loose hay	:	3.0	1.72	.55	84	1.39
Bale, contract	:	3.0	1.74	1.04	16	.50
Haul bales	:	3.0	2.10	.93	16	.45
Total harvest	:	:	:	:	9.31	5.19
Total	:	:	:	:	30.13	6.08

1/ Nearly all of the farms in this area seeded hay crops with a nurse crop. As a result the total given here is one-half of the total required jointly to establish the seeding and the nurse crop.

2/ The estimated average life of alfalfa hay seedings in this area is approximately 4 years. The labor, power, and machinery charged to establishing the seeding are prorated annually to the hay crop according to the average life of seeding.

ALFALFA HAY: RESOURCES USED IN PRODUCTION, AREA VI-E1, 1949

The data presented here are based on a survey of 30 farms producing alfalfa hay in central Texas. These farms are located in type-of-farming area VI-E1, a livestock and cash grain area in the Grand Prairie of Texas. Nearly all of the alfalfa in this area is planted without a nurse crop. Farmers in this area reported that an alfalfa seeding usually lasted about 5 years. Consequently, the annual charges are based upon a 5-year stand.

The farms surveyed averaged 502 acres per farm. In 1949, 247 acres were in crops, including 73 acres in alfalfa cut for hay. The average yield of alfalfa was 3.0 tons per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The drawbar-horsepower rating of these tractors ranged from 7 to 27; the most common was about 18.

Materials used and contract work hired, 1949

MATERIALS USED

Item	: Unit	: Quantity: per acre	: Price : per unit	: Cost : per acre	: Average : Acreage: covered	: cost : per acre
		: Number	: Dollars	: Dollars	: Percent	: Dollars
Establish seeding, total:						
Alfalfa seed	: Lb.	: 20	: 0.30	: 6.00	: 100	: 6.00
Inoculant	: Lb.	: 20	: .02	: .40	: 23	: .09
Superphosphate fertilizer	: Cwt.	: 2.30	: 1.75	: 4.02	: 42	: 1.69
Total for establishment						: 7.78
Annual charge to alfalfa	: ---	: ---	: ---	: ---	: ---	: 1.56
Superphosphate fertilizer	: Cwt.	: 2.30	: 1.75	: 4.02	: 8	: .32
Bale ties (wire)	: No.	: 204	: .01	: 2.04	: 75	: 1.53
Baler twine	: Lb.	: 9.3	: .25	: 2.32	: 25	: .58
Total annual charge						: 3.99

CONTRACT WORK HIRED

Harvesting hay <u>1/</u>	: Ton	: 3.0	: 6.00	: 18.00	: 27	: 4.86
Baling	: Bale	: 102	: .12	: 12.24	: 17	: 2.08
Hauling	: Bale	: 102	: .06	: 6.12	: 83	: 5.08
Total contract work						: 12.02

1/ Includes all harvest operations, mowing, raking and baling. The contract operator supplies all the power, machinery and labor.

Man labor, power, and machinery used by operation in producing and harvesting alfalfa hay, area VI-E1, central Texas, 1949

Operation	Size	Time per acre:			Average time per	
	of	Times:	once over	Acreage:	acre - all farms	
	equipment:	over	Man	Power	covered:	Man :Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs. :Hrs.
Establish seeding, total	---	---	---	---	---	5.91 :5.53
Establish seeding, annual	---	---	---	---	1/8	1.18 :1.11
Fertilize, spreader	8-foot	1.0	0.37	0.34	8	.03 :.03
Harrow, springtooth	6-foot	1.0	.55	.50	7	.04 :.04
Total preharvest						1.25 :1.18
Mow	7-foot	3.5	.39	.37	64	.87 :.83
Mow and windrow	7-foot	3.5	.33	.31	9	.10 :.10
Mow, contract	7-foot	3.5	.39	.37	27	.37 :.35
Rake, side-delivery	10-foot	3.5	.35	.34	64	.78 :.76
Rake, side-delivery, c.	10-foot	3.5	.35	.34	27	.33 :.32
Bale, pick-up	---	3.5	1.67	.46	56	3.27 :.90
Bale, pick-up, contract	---	3.5	1.10	.36	44	1.69 :.55
Haul bales, truck	1½-ton	3.5	.92	.34	17	.55 :---
Haul bales, contract, t.	1½-ton	3.5	.50	.23	83	1.45 :---
Total harvest						9.41 :3.81
Total 2/						10.66 :4.99

1/ In this area approximately 100 percent of the farms were seeded without a nurse crop and the average life of the crop was 5 years.

2/ In addition, truck use averaged 0.86 hour an acre.

BARLEY (IRRIGATED): RESOURCES USED IN PRODUCTION, AREA IX-F2, 1951

The data presented here are based on a survey made in 1951 of approximately 50 farms producing barley under irrigation in 1951 in southeastern Wyoming and west central Nebraska. These farms are located in type-of-farming area IX-F2, a specialized crop and general farming area along the North Platte and Laramie Rivers. The particular farms surveyed are diversified, producing livestock, hay, corn, small grains, and specialized crops.

The farms averaged about 190 acres per farm. Cropland comprised about 131 acres. In 1951, approximately 21 acres were in barley, and the yield was about 40 bushels per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of the tractors ranged from 13 to 27. There were two common sizes: 14 and 26.

Materials used and contract work hired, 1951

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Average Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Seed	Cwt.	1.10	4.00	4.40	100	4.40
Seed-treating	Cwt.	1.10	.25	.28	86	.24
Manure	Ton	7 1/2	2.00	14.00	5	.70
Spray (2,4-D)	Pt.	1.0	.50	.50	9	.04
Water	Acre	1.0	1.90	1.90	100	1.90
Twine	Lb.	3.4	.35	1.19	26	.31
Total materials						7.28

CONTRACT WORK HIRED

Binding	Acre	1.0	2.50	2.50	6	.15
Combining	Acre	1.0	5.00	5.00	34	1.70
Threshing	Bu.	40	.13	5.20	20	1.04
Hauling, truck	Bu.	40	.05	2.00	5	.10
Total contract work						2.99

1/ Estimated.

Man labor, power, and machinery used by operation in producing and harvesting
barley, irrigated, area IX-F2, southeastern Wyoming and west central
Nebraska, 1951

Operation	Size	Time per acre:			Average time per		
	of	Times:	once over	Acreage:	acre - all farms		
	equipment:	over	Man	Power:	covered:	Man	Tractor
	No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.	
Apply manure, loader-sp.	:75-bu.	1.0	3.85	3.85	5	0.19	0.19
Plow, moldboard	:2-14 inch	1.0	1.50	1.43	24	.36	.34
Plow, moldboard	:2-16 inch	1.0	1.26	1.21	29	.37	.35
Plow, subsoil	: 8-foot	1.4	.67	.64	28	.26	.25
Disk, tandem	: 8-foot	1.5	.55	.50	52	.43	.39
Harrow, springtooth	: 9-foot	1.7	.55	.50	17	.16	.14
Harrow, spiketooth	:15-foot	1.8	.31	.28	84	.47	.42
Level	:10-foot	1.6	.47	.45	88	.66	.63
Seed, drill	:10-foot	1.0	.52	.47	100	.52	.47
Harrow, spiketooth	:15-foot	1.0	.28	.25	30	.08	.08
Ditch	: ---	1.0	.37	.24	93	.34	.22
Ditch, by hand	: ---	1.0	.47	---	15	.07	---
Irrigate	: ---	1.8	3.60	---	100	6.48	---
Spray	:24-foot	1.0	.57	.43	9	.05	.04
Total preharvest	:					10.44	3.52
Windrow	: 7-foot	1.0	.60	.55	12	.07	.07
Bind	: 8-foot	1.0	1.00	.88	20	.20	.18
Bind, contract	: 8-foot	1.0	1.00	.88	6	.06	.05
Shock by hand	: ---	1.0	2.42	---	22	.53	---
Haul bundles	: ---	1.0	2.41	1.61	26	.89	.42
Thresh	:22-inch	1.0	1.36	.52	6	.08	.03
Thresh, contract	:22-inch	1.0	1.36	.52	20	.27	.10
Combine	: 6-foot	1.0	1.38	1.26	40	.55	.50
Combine, contract	: 6-foot	1.0	1.38	1.26	34	.47	.43
Haul grain, truck	:1½-ton	1.0	1.07	1.16	80	.86	---
Haul grain, contract, t.	:1½-ton	1.0	1.07	1.16	5	.05	---
Total harvest	:					4.03	1.78
Total 1/	:					14.47	5.30

1/ In addition, truck use averaged 0.99 hour an acre.

BARLEY: RESOURCES USED IN PRODUCTION, AREA III-A3, 1947

The data presented here are based on a survey made in 1948 of 46 farms ranging in size from 340 to 700 acres. In this group there were 29 farms that produced barley in 1947. These farms are primarily crop farms located in central and northern North Dakota. Production of wheat, oats, and flax is also important on these farms.

The 46 farms surveyed averaged 507 total acres. In 1947, cropland averaged 411 acres per farm. The 29 farms that produced barley averaged 55 acres of barley per farm, and the average yield was 21 bushels per acre.

Tractors provided most of the power used in the production of barley. Trucks were used to haul barley from the combines, and horses were used to haul bundles on some of the farms where barley was threshed. The drawbar-horsepower rating of tractors used on these farms ranged from 10 to 32; the most common was about 21.

Materials used and contract work hired, 1947

MATERIALS USED

Item	: Unit	: Quantity per acre	: Price per unit	: Cost per acre	: Average Acreage covered	: Average cost per acre
		: Number	Dollars	Dollars	Percent	Dollars
Home-grown seed	: Bu.	: 1.5	1.50	2.25	66	1.48
Purchased seed	: Bu.	: 1.5	2.10	3.15	34	1.07
Ceresan	: Bu.	: 1.5	.06	.09	58	.05
Twine	: Lb.	: 2.0	.23	.46	31	.14
Total materials						2.74

CONTRACT WORK HIRED

Combining	: Acre	: 1.0	3.80	3.80	17	.65
Total contract work:						.65

Man labor, power, and machinery used by operation in producing and
harvesting barley, area III-A3, central and northern
North Dakota, 1947

Operation	: Size : of : equipment:	: Time per acre:			: Average time per		
		: Times:	: once over	: Acreage:	: acre - all farms	: Man	: Tractor
		: over	: Man	: Power	: covered:	: Man	: Tractor
		: No.	: Hrs.	: Hrs.	: Pct.	: Hrs.	: Hrs.
Plow, moldboard	: 3-14 inch	1.1	0.74	0.70	55	0.45	0.42
Plow and pack	: 3-14 inch	1.0	.80	.77	20	.16	.15
Disk	: 10-foot	2.1	.34	.33	16	.11	.11
Field cultivate	: 12-foot	1.4	.30	.29	24	.10	.10
Harrow, spiketooth	: 26-foot	1.2	.14	.13	40	.07	.06
Drill	: 11-foot	1.0	.29	.28	71	.21	.20
Plow, pack & pony drill	: 42-inch	1.0	.90	.86	25	.22	.22
Disk and drill	: 10-foot	1.0	.38	.36	4	.02	.01
Harrow, spiketooth	: 26-foot	1.1	.14	.13	75	.12	.11
Total preharvest	:					1.46	1.38
Windrow	: 12-foot	1.0	.38	.33	62	.24	.20
Combine	: 7-foot	1.0	.71	.54	35	.25	.19
Combine	: 12-foot	1.0	.53	.41	17	.09	.07
Combine, contract	: 12-foot	1.0	.53	.41	17	.09	.07
Haul from combine, t.	: ---	1.0	.42	.28	69	.29	---
Bind	: 8-foot	1.0	.64	.42	22	.14	.09
Bind	: 10-foot	1.0	.62	.38	9	.06	.03
Shock by hand	: ---	1.0	.88	---	23	.20	---
Haul bundles	: ---	1.0	.87	.57	13	.11	.07
Haul bundles, horses	: ---	1.0	.99	1.51	18	.18	---
Thresh	: 28-inch	1.0	.24	.23	31	.07	.07
Haul grain	: ---	1.0	.22	.20	31	.07	.06
Total harvest	:					1.79	.85
Total <u>1/</u>	:					3.25	2.23

1/ In addition, horse work averaged 0.27 hour an acre and truck use 0.19 hour an acre.

BARLEY: RESOURCES USED IN PRODUCTION, AREA III-C2, 1950

The data presented here are based on a survey made in 1951 of 24 farms producing barley. These farms are located in type-of-farming area III-C2, a wheat and range-livestock area in northeastern Montana and southwestern North Dakota.

The farms surveyed averaged 1,309 acres per farm. Cropland comprised about 588 acres. In 1950, 60 acres were in barley, and the yield averaged 22 bushels per acre.

Tractors provided most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 13 to 41; the most common was about 27.

Materials used and contract work hired, 1950

MATERIALS USED

Item	: Unit	: Quantity : per acre	: Price : per unit	: Cost : per acre	: Average : Acreage : covered	: cost : per acre
		: Number	Dollars	Dollars	Percent	Dollars
Home-grown seed	: Bu.	: 1.4	0.95	1.33	93	1.24
Purchased seed	: Bu.	: 1.4	1.15	1.61	7	.11
Twine	: Lb.	: 3.6	.28	1.01	9	.09
Total materials	:	:				1.44

CONTRACT WORK HIRED

Threshing	: Bu.	: 22	.14	3.08	4	.12
Total contract work	:	:				.12

Man labor, power, and machinery used by operation in producing and harvesting barley, area III-C2, northeastern Montana and southwestern North Dakota, 1950

Operation	Size	Time per acre:			Average time per		
	of	Times:	once over		Acreage:acre - all farms		
	equipment:	over	Man	Power	covered:	Man	Tractor
	No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.	
Apply manure, spreader	:90-bu.	1.0	5.50	2.50	1	0.06	0.03
Plow, moldboard	:3-14 inch	1.0	.73	.69	20	.15	.14
Plow, one-way	: 8-foot	1.5	.28	.26	22	.09	.09
Plow and pack	:3-14 inch	1.0	.85	.81	9	.08	.07
Harrow, spiketooth	:20-foot	1.3	.12	.12	34	.53	.53
Disk, tandem	:10-foot	1.0	.25	.24	13	.03	.03
Plow, pack, and pony drill	: 4-foot	1.0	.53	.48	31	.16	.15
Disk and drill	:12-foot	1.0	.40	.37	21	.08	.08
Drill	:10-foot	1.0	.30	.27	48	.14	.13
Harrow, spiketooth	:20-foot	1.2	.12	.12	29	.42	.42
Total preharvest	:					1.74	1.67
Windrow	:12-foot	1.0	.24	.23	25	.06	.06
Combine	:12-foot	1.0	.37	.29	91	.34	.26
Haul grain, truck	: ---	1.0	.28	.14	91	.25	---
Bind	: 8-foot	1.0	.75	.40	9	.07	.04
Shock by hand	: ---	1.0	.94	---	9	.08	---
Haul bundles	: ---	1.0	1.45	.50	3	.04	.02
Haul bundles, horses	: ---	1.0	1.21	1.76	6	.07	---
Thresh	:26-inch	1.0	.65	.27	5	.03	.01
Thresh, contract	:26-inch	1.0	.66	.20	4	.03	.01
Haul grain, truck	: ---	1.0	1.30	.59	9	.12	---
Total harvest	:					1.09	.40
Total 1/	:					2.84	2.07

1/ In addition, horse work averaged 0.11 hour an acre and truck use 0.18 hour an acre.

BARLEY: RESOURCES USED IN PRODUCTION, AREA III-E2, 1950

The data presented here are based on a survey of approximately 29 farms in 1951, in eastern North Dakota and western Minnesota. These farms are in type-of-farming area III-E2, a spring wheat, small grain, live-stock, potato and sugar beet area in the Red River Valley.

The farms surveyed averaged 422 total acres. In 1950, 340 acres were in crops, including 72 in barley. The average yield of barley was approximately 33 bushels per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 14 to 32; the most common was about 21.

Materials used and contract work hired, 1950

MATERIALS USED

Item	: Unit	: Quantity: per acre	: Price : per unit	: Cost : per acre	: Average : Acreage: covered: per acre	: Average cost
		: Number	Dollars	Dollars	Percent	Dollars
Home-grown seed	: Bu.	: 1.8	1.35	2.43	68	1.65
Purchased seed	: Bu.	: 1.8	1.95	3.51	32	1.12
Mixed fertilizer	: Cwt.	: .75	3.40	2.55	12	.31
Phosphate fertilizer	: Cwt.	: .80	3.45	2.76	11	.30
Spray	: Pt.	: 1.0	1.00	1.00	13	.13
Twine	: Lb.	: 3.5	.25	.88	4	.04
Total materials	:	:				3.55

CONTRACT WORK HIRED

Spraying	: Acre	: 1.0	.90	.90	13	.12
Total contract work	:	:				.12

Man labor, power, and machinery used by operation in producing
and harvesting barley, area III-E2, eastern North Dakota
and western Minnesota, 1950

Operation	: Size :	:Time per acre:			:Average time per		
	: of :	:Times:	once over		:Acreage:	acre - all farms	
	:equipment:	:over :	Man	Power	:covered:	Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Plow, moldboard	:3-14 inch	1.0	0.70	0.61	97	0.68	0.59
Disk, tandem	:10-foot	1.4	.28	.26	37	.14	.13
Harrow, spiketooth	:25-foot	1.5	.10	.09	86	.13	.11
Field cultivate	:11-foot	2.0	.24	.23	91	.44	.42
Disk harrow	:10-foot	1.0	.74	.70	2	.01	.01
Seed, drill	:11-foot	1.0	.26	.24	100	.26	.24
Harrow, spiketooth	:25-foot	1.1	.10	.09	84	.09	.08
Spray, plane, contract	: ---	1.0	.04	---	13	.01	---
Total preharvest	:					1.76	1.58
Swath	:12-foot	1.0	.21	.20	95	.20	.19
Combine	:10-foot	1.0	.55	.51	75	.41	.38
Combine, s.p.	:12-foot	1.0	.37	.34	21	.08	---
Haul from combine	: ---	1.0	.47	.32	96	.45	.31
Bind	: 8-foot	1.0	.82	.75	4	.03	.03
Shock	: ---	1.0	.80	---	4	.03	---
Haul bundles	: ---	1.0	1.10	.19	4	.04	.01
Thresh	: ---	1.0	.39	.34	4	.02	.01
Haul grain	: ---	1.0	.34	.23	4	.01	.01
Total harvest	:					1.27	.94
Total 1/	:					3.03	2.52

1/ In addition, self-propelled combine was used an average of 0.07 hour an acre.

BARLEY: RESOURCES USED IN PRODUCTION, AREA III-E3, 1949

The data presented here are based on a 1950 survey of 31 farms that produced barley in 1949. These farms are located in southeastern North Dakota and east-north central South Dakota. This is a transition area between the Corn Belt and the Northern Plains wheat area. Wheat, flax, corn, hay and other feed crops, and livestock are the important products of these farms.

The farms surveyed averaged 680 total acres of which 444 acres were in crops in 1949. Planted acreage of barley averaged 49 per farm and harvested acreage averaged 42. The average yield of barley was 10 bushels per harvested acre in 1949.

Tractors and motorized equipment provided most of the power used on these farms. They were used for all operations except hauling. Trucks were used frequently for hauling grain from the combine or thresher, and horses were used occasionally for hauling bundles on farms where barley was threshed. The drawbar-horsepower rating of tractors on these farms ranged from 10 to 27; the most common was about 19.

Materials used and contract work hired, 1949 1/

MATERIALS USED

Item	: Unit	: Quantity per acre	: Price per unit	: Cost per acre	: Average Acreage covered	: cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Home-grown seed	: Bu.	: 1.5	0.85	1.28	75	0.96
Purchased seed	: Bu.	: 1.5	1.60	2.40	25	.60
Ceresan	: Bu.	: 1.5	.09	.14	14	.02
Spray (2,4-D)	: Pt.	: 1.0	.75	.75	5	.04
Twine	: Lb.	: 1.2	.24	.29	15	.04
Total materials	:	:				1.66

1/ No contract work was reported on farms surveyed in this area.

Man labor, power, and machinery used by operation in producing and
harvesting barley, area III-E3, southeastern North Dakota
and east-north central South Dakota, 1949

Operation	: Size :	:Time per acre:			:Average time per		
	: of :	:Times:	once over		:Acreage:	acre - all farms	
	:equipment:	over :	Man	Power	covered:	Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Plow, moldboard	:2-14 inch	1.0	1.10	1.05	10	0.11	0.10
Plow, moldboard	:3-14 inch	1.0	.74	.70	50	.37	.35
Plow, moldboard	:4-14 inch	1.0	.55	.52	21	.12	.11
Plow, one-way	: 8-foot	1.0	.35	.34	11	.04	.04
Disk, single	:15-foot	1.1	.26	.25	27	.08	.07
Disk, tandem	: 9-foot	1.1	.37	.35	15	.06	.06
Harrow, spiketooth	:28-foot	1.3	.13	.12	88	.15	.14
Field cultivate	: 9-foot	3.2	.39	.37	12	.15	.14
Clean seed, fanning mill:	---	1.0	.04	---	54	.02	---
Seed, drill	:11-foot	1.0	.34	.32	100	.34	.32
Harrow, spiketooth	:28-foot	1.1	.13	.13	71	.10	.10
Spray	: ---	1.0	.15	.14	5	.01	.01
Total preharvest	:					1.55	1.44
Windrow	:12-foot	1.0	.23	.22	82	.19	.18
Combine	: 6-foot	1.0	.43	.41	43	.18	.18
Combine	:12-foot	1.0	.37	.36	26	.10	.09
Combine, self-propelled	:12-foot	1.0	.28	.26	16	.04	---
Haul from combine, truck:	---	1.0	.32	.24	63	.20	---
Haul to market, truck	: ---	1.0	.12	.12	18	.02	---
Bind	:10-foot	1.0	.48	.40	15	.07	.06
Shock by hand	: ---	1.0	.54	---	9	.05	---
Haul bundles	: ---	1.0	.89	.57	6	.05	.03
Haul bundles, horses	: ---	1.0	1.01	1.51	9	.09	---
Thresh	:26-inch	1.0	.23	.22	15	.03	.03
Haul grain	: ---	1.0	.25	.16	15	.04	.02
Elevate grain	: ---	1.0	.25	.11	15	.04	.02
Total harvest	:					1.10	.61
Total 1/	:					2.65	2.05

1/ In addition, horse work averaged 0.14 hour an acre, self-propelled combine use 0.04 hour an acre, and truck use 0.02 hour an acre.

BARLEY: RESOURCES USED IN PRODUCTION, AREA V-A1, 1949

The data presented here are based on a survey of approximately 40 farms in 1950 producing barley in northeastern Nebraska and southeastern South Dakota. The farms are located in the northwest part of type-of-farming area V-A1, a cattle feeding and hog area.

The farms surveyed averaged 312 total acres. In 1949, 262 acres were in crops, including 31 acres of barley. The average yield of barley was approximately 26 bushels per acre.

Tractors provide most of the power on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 10 to 27; the most common was about 19.

Materials used and contract work hired, 1949

MATERIALS USED

Item	: Unit	: Quantity : : per : : acre	Price : : per : : unit	Cost : : per : : acre	:Average :Acreage: :covered:	cost :per acre
		: Number	Dollars	Dollars	Percent	Dollars
Seed ^{1/}	: Bu.	: 2.0	2.05	4.10	100	4.10
Ceresan	: Bu.	: 2.0	.03	.06	54	.03
Manure	: Ton	: 5 ^{2/}	2.00	10.00	11	1.10
Spray (2,4-D)	: Pt.	: .85	.85	.72	39	.28
Twine	: Lb.	: 2.0	.27	.54	26	.14
Total materials	:	:	:	:	:	5.65

CONTRACT WORK HIRED

Clean and treat seed	: Bu.	: 2.0	.04	.08	29	.02
Threshing	: Bu.	: 26	.05	1.30	23	.30
Total contract work	:	:	:	:	:	.32

^{1/} Approximately 23 percent of the farmers in this area purchased seed barley.

^{2/} Estimated.

Man labor, power, and machinery used by operation in producing and
harvesting barley, area V-A1, northeastern Nebraska and
southeastern South Dakota, 1949

Operation	: Size :	:Time per acre:			:Average time per		
	: of :	:Times:	once over		:Acreage:	acre - all farms	
	:equipment:	over :	Man :	Power :	covered:	Man :	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Load manure	: ---	1.0	1.53	1.39	1	0.02	0.01
Apply manure, spreader	: ---	1.0	1.84	.84	11	.20	.09
Disk, tandem	:10-foot	2.0	.36	.34	11	.08	.07
Disk, single	:15-foot	2.1	.22	.21	89	.41	.39
Plow, moldboard	:3-16 inch	1.0	.64	.61	10	.06	.06
Harrow, spiketooth	:24-foot	1.7	.12	.11	95	.19	.18
Seed, drill	:11-foot	1.0	.32	.31	50	.16	.16
Clean & treat seed	: ---	1.0	.10	---	25	.02	---
Clean & treat seed, c.	: ---	1.0	.10	---	29	.03	---
Seed, endgate	: ---	1.0	.28	.13	38	.11	.05
Seed, endgate, horses	: ---	1.0	.16	.31	12	.02	---
Roll	:15-foot	1.0	.21	.20	15	.03	.03
Spray	:24-foot	1.0	.20	.19	39	.08	.07
Total preharvest	:					1.41	1.11
Windrow	:10-foot	1.0	.46	.36	53	.24	.19
Combine, power take-off	: 5-foot	1.0	.76	.73	37	.28	.27
Combine	: 8-foot	1.0	.52	.50	37	.19	.18
Haul from combine	: ---	1.0	.35	.35	74	.26	.26
Bind	:10-foot	1.0	1.04	.50	26	.27	.13
Shock	: ---	1.0	.82	---	26	.21	---
Haul bundles, horses	: ---	1.0	.82	3.42	26	.21	---
Thresh	: ---	1.0	.48	.29	3	.01	.01
Thresh, contract	: ---	1.0	.48	.29	23	.11	.07
Haul from thresher	: ---	1.0	.63	.57	26	.16	.15
Total harvest	:					1.94	1.26
Total 1/	:					3.35	2.37

1/ In addition, horse work averaged 0.93 hour an acre.

BARLEY: RESOURCES USED IN PRODUCTION, AREA V-F⁴, 1949

The data presented here are based on a survey made in 1950 of approximately 41 farms in northeastern South Dakota and west central Minnesota. These farms are located in type-of-farming area V-F⁴, a livestock and cash-grain area in the northwestern Corn Belt fringe.

The farms surveyed averaged 370 total acres per farm. In 1949, 305 acres were in crops, including 40 acres in barley. The average yield of barley was approximately 2¹/₄ bushels per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 15 to 27; the most common was about 20.

Materials used and contract work hired, 1949

MATERIALS USED

Item	: Unit	: Quantity : : per : : acre	Price : : per : : unit	Cost : : per : : acre	: Average : Acreage : : covered : : Percent	: cost : per acre
		: Number	Dollars	Dollars	Percent	Dollars
Seed ¹ / ₁	: Bu.	: 1.8	1.65	2.97	100	2.97
Ceresan	: Bu.	: 1.8	.05	.09	28	.05
Manure	: Ton	: 4	² / ₂ 2.00	8.00	7	.56
Mixed fertilizer	: Cwt.	: 1.15	2.70	3.10	11	.34
Spray (2,4-D)	: Pt.	: .8	.70	.56	45	.25
Twine	: Lb.	: 2.4	.23	.55	23	.13
Total materials						4.30

CONTRACT WORK HIRED

Combining	: Acre	: 1.0	3.70	3.70	8	.30
Haul from combine	: Bu.	: 24	.03	.72	17	.12
Threshing	: Bu.	: 24	.04	.96	19	.18
Total contract work						.60

¹/₁ Approximately 23 percent of the farmers in this area purchased seed barley.

²/₂ Estimated.

Man labor, power, and machinery used by operation in producing and harvesting barley, area V-F⁴, northeastern South Dakota, and west central Minnesota, 1949

Operation	: Size	: Time per acre:	:Average time per				
	: of	:Times: once over	:Acreage:	:acre - all farms			
	:equipment:	:over	: Man	: Power	:covered:	: Man	: Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Apply manure, spreader	: ---	1.0	2.20	1.00	7	0.15	0.07
Plow, moldboard	: 2-14 inch	1.0	1.19	1.13	12	.14	.14
Plow, moldboard	: 3-14 inch	1.0	.80	.77	52	.42	.40
Plow, moldboard	: 5-14 inch	1.0	.50	.47	10	.05	.05
Disk, tandem	: 10-foot	1.7	.36	.34	11	.07	.06
Disk, single	: 15-foot	1.7	.25	.24	59	.25	.24
Field cultivate	: 10-foot	1.2	.49	.47	16	.09	.09
Harrow, spiketooth	: 25-foot	1.4	.12	.11	100	.17	.15
Clean seed	: ---	1.0	.11	---	23	.03	---
Clean and treat seed	: ---	1.0	.11	---	28	.03	---
Drill	: 11-foot	1.0	.32	.31	100	.32	.31
Harrow, spiketooth	: 25-foot	1.0	.12	.11	40	.05	.04
Spray	: 30-foot	1.0	.18	.13	45	.08	.06
Total preharvest	:					1.85	1.61
Windrow	: 10-foot	1.0	.34	.33	77	.26	.25
Combine	: 6-foot	1.0	.65	.59	31	.20	.18
Combine	: 10-foot	1.0	.49	.45	24	.12	.11
Combine, self-propelled	: 12-foot	1.0	.35	.32	14	.05	---
Combine, contract	: 10-foot	1.0	.49	.45	8	.04	.03
Haul from combine	: ---	1.0	.29	.22	60	.17	.13
Haul from combine, c.	: ---	1.0	.29	.22	17	.05	.04
Bind	: 8-foot	1.0	1.03	.53	9	.09	.05
Bind	: 10-foot	1.0	.67	.36	14	.09	.05
Shock	: ---	1.0	.94	---	23	.22	---
Haul bundles	: ---	1.0	1.96	1.34	5	.10	.07
Haul bundles, horses	: ---	1.0	1.58	2.87	18	.28	---
Thresh	: 26-inch	1.0	.33	.29	4	.01	.01
Thresh, contract	: 26-inch	1.0	.30	.29	19	.06	.06
Haul grain, truck	: ---	1.0	.29	.25	17	.05	---
Total harvest	:					1.79	.98
Total 1/	:					3.64	2.59

1/ In addition, horse work averaged 0.52 hour an acre, truck use 0.04 hour an acre, and self-propelled combines 0.04 hour an acre.

BARLEY: RESOURCES USED IN PRODUCTION, AREA VI-E1, 1949

The data presented here are based on a survey in 1950 of 30 farms producing barley in central Texas. These farms are located in type-of-farming area VI-E1, a livestock and cash grain area in the Grand Prairie of Texas.

The farms surveyed averaged 429 acres per farm. In 1949, 160 acres were in crops, including 21 acres in barley. The average yield of barley was 30 bushels per acre.

Tractors provided most of the power used on these farms, although horses are still used in performing some operations. The drawbar-horsepower rating of these tractors ranged from 11 to 31; the most common was about 18.

Materials used and contract work hired, 1949

MATERIALS USED

Item	: Unit	: Quantity per acre	: Price per unit	: Cost per acre	: Average Acreage covered	: Average cost per acre
		: Number	Dollars	Dollars	Percent	Dollars
Seed ^{1/}	: Bu.	: 1.4	2.50	3.50	100	3.50
Superphosphate fertilizer	: Cwt.	: 1.70	1.70	2.89	16	.46
Sacks	: No.	: 15	.15	2.25	39	.88
Total materials						3.84

CONTRACT WORK HIRED

Combining	: Acre	: 1.0	3.50	3.50	13	.46
Hauling	: Bu.	: 30	.04	1.20	20	.24
Total contract work						.70

^{1/} Approximately 28 percent of the farmers in this area purchased seed barley.

Man labor, power, and machinery used by operation in producing and
harvesting barley, area VI-El, central Texas, 1949

Operation	: Size	: Time per acre:			: Average time per			
	: of	: Times:	: once over		: Acreage:	: acre - all farms		
	: equipment:	: over	: Man	: Power	: covered:	: Man:	: Tractor:	: Horse
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.	Hrs.
Cut stalks	: 2-row	1.0	0.42	0.41	9	0.04	0.04	---
Plow, disk	: 3-disk	1.2	1.04	1.00	69	.86	.83	---
Plow, disk, horses	: 2-disk	1.0	2.20	8.40	3	.07	---	0.25
Plow, one-way	: 7-foot	1.6	.63	.60	49	.49	.47	---
Disk, tandem	: 7-foot	1.1	.38	.37	29	.12	.12	---
Disk, single	: 18-foot	1.3	.19	.18	12	.03	.03	---
Disk, single, horses	: 6-foot	1.0	1.56	6.13	3	.05	---	.18
Harrow, spiketooth	: 12-foot	1.3	.25	.23	62	.20	.19	---
Harrow, springtooth	: 6-foot	2.3	.64	.59	4	.06	.05	---
Fertilize	: 12-foot	1.0	.46	.42	6	.03	.03	---
Seed, drill	: 12-foot	1.0	.44	.40	97	.43	.39	---
Seed, drill, horses	: 7-foot	1.0	1.20	4.20	3	.04	---	.13
Total preharvest	:					2.42	2.15	.56
Windrow	: 8-foot	1.0	.45	.39	26	.12	.10	---
Combine	: 6-foot	1.0	1.32	.52	87	1.15	.45	---
Combine, contract	: 6-foot	1.0	1.21	.62	13	.16	.08	---
Haul grain	: ---	1.0	.14	.10	77	.11	.08	---
Haul grain, horses	: ---	1.0	.67	.34	3	.02	---	.01
Haul to market, t., contract:	1½-ton	1.0	.17	.09	20	.03	---	---
Total harvest	:					1.59	.71	.01
Total 1/	:					4.01	2.86	.57

1/ In addition, truck use averaged 0.02 hour an acre.

BARLEY: RESOURCES USED IN PRODUCTION, AREA VII-A2, 1949

Data presented here are based on a survey in 1950 of 28 farms producing barley in east central Texas. These farms are located in type-of-farming area VII-A2, a specialized cotton area in the Black Waxy Prairie.

The farms surveyed averaged 221 acres. In 1949, 186 acres were in crops, including 15 acres in barley. The yield of barley averaged about 15 bushels per harvested acre.

Tractors and motorized equipment provide all of the power used in producing barley. The drawbar-horsepower rating of tractors ranged from 9 to 41; the most common was about 18.

Materials used and contract work hired, 1949

MATERIALS USED

Item	: Unit	: Quantity : per acre	Price : per unit	Cost : per acre	: Average Acreage : covered	: cost per acre
		: Number	Dollars	Dollars	Percent	Dollars
Seed <u>1</u> /	: Bu.	: 1.7	1.70	2.89	100	2.89
Superphosphate fertilizer	: Cwt.	: 2.00	1.50	3.00	3	.09
Total materials	:	:				2.98

CONTRACT WORK HIRED

Cleaning seed	: Bu.	: 1.7	.15	.26	6	.02
Combining	: Acre	: 1.0	3.45	3.45	32	1.10
Total contract work	:	:				1.12

1/ Approximately 46 percent of the farmers in this area purchased seed barley.

Man labor, power, and machinery used by operation in producing and harvesting barley, area VII-A2, east central Texas, 1949

Operation	: Size :	:Time per acre:			:Average time per		
	: of :	:Times:	once over		:Acreage:	acre - all farms	
	:equipment:	:over :	Man	Power	:covered:	Man	:Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Cut stalks	: 2-row	1.0	0.40	0.39	24	0.10	0.09
Plow, disk	: 3-disk	1.0	1.28	1.22	60	.77	.73
Plow, one-way	: 5-foot	1.9	.77	.74	83	1.21	1.17
Disk, tandem	: 7-foot	1.0	.57	.55	18	.10	.10
Harrow, spiketooth	:12-foot	1.1	.31	.28	42	.14	.13
Harrow, springtooth	: 6-foot	1.0	.46	.42	3	.01	.01
Fertilize, drill	:12-foot	1.0	.33	.31	3	.01	.01
Seed, drill	: 9-foot	1.0	.51	.46	100	.51	.46
Harrow, spiketooth	: 8-foot	1.0	.31	.28	4	.01	.01
Total preharvest	:					2.86	2.71
Windrow	:10-foot	1.0	.63	.55	7	.04	.04
Combine	: 6-foot	1.0	.76	.62	68	.52	.42
Combine, contract	: 6-foot	1.0	.79	.56	32	.25	.18
Haul grain, truck	: 1-ton	1.0	.10	.09	70	.07	---
Haul to market, truck	:1½-ton	1.0	.13	.13	30	.04	---
Total harvest	:					.92	.64
Total 1/	:					3.78	3.35

1/ In addition, truck use averaged 0.10 hour an acre.

DRY BEANS (IRRIGATED): RESOURCES USED IN PRODUCTION,
AREA IX-F2, 1951

The data presented here are based on a survey made in 1951 of approximately 55 farms producing dry field beans under irrigation in 1951 in southeastern Wyoming and west central Nebraska. These farms are located in type-of-farming area IX-F2, a specialized crop and general farming area along the North Platte and Laramie Rivers. The particular farms surveyed are diversified, producing livestock, hay, corn, small grains, and specialized crops.

The farms averaged about 235 acres per farm. Cropland comprised about 152 acres. In 1951, approximately 37 acres were in beans, and the yield was about 32 bushels per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of the tractors ranged from 14 to 27. There were two common sizes: 16 and 26.

Materials used and contract work hired, 1951

MATERIALS USED

Item	: Unit	: Quantity : per acre	: Price : per unit	: Cost : per acre	: Average : Acreage : covered	: cost : per acre
		: Number	: Dollars	: Dollars	: Percent	: Dollars
Seed	: Cwt.	: 0.65	10.75	6.99	100	6.99
Manure	: Ton	: 9	<u>1</u> /2.00	18.00	10	1.80
Mixed fertilizer (10-24-0)	: Cwt.	: 1.20	4.15	4.98	15	.75
Nitrate fertilizer (33-0-0)	: Cwt.	: 1.00	4.25	4.25	11	.47
Phosphate fertilizer (0-42-0)	: Cwt.	: 1.00	3.80	3.80	21	.80
Sulphur dust	: Lb.	: 25	.05	1.25	39	.49
Water	: Acre	: 1.0	2.25	2.25	100	<u>2.25</u>
Total materials						13.55

CONTRACT WORK HIRED

Weeding	: Acre	: 1.0	4.50	4.50	45	2.02
Dusting	: Acre	: 1.0	1.75	1.75	30	.52
Combining	: Bu.	: 32	.30	9.60	25	2.40
Threshing	: Bu.	: 32	.28	8.96	11	<u>.99</u>
Total contract work						5.93

1/ Estimated.

Man labor, power, and machinery used by operation in producing and harvesting dry beans, irrigated, area IX-F2, southeastern Wyoming and west central Nebraska, 1951

Operation	Size	Time per acre:			Average time per		
	of	Times:	once over	Acreage:	acre - all farms		
	equipment:	over	Man	Power	covered:	Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Apply manure, loader-sp.	: 75-bu.	1.0	4.56	4.56	10	0.46	0.46
Plow, moldboard	: 2-16 inch	1.0	1.26	1.21	70	.88	.85
Plow, moldboard	: 2-14 inch	1.0	1.50	1.43	30	.45	.43
Plow, subsoil	: 8-foot	1.9	.52	.49	22	.22	.20
Disk, tandem	: 8-foot	1.6	.55	.50	72	.63	.58
Harrow, spiketooth	: 15-foot	2.0	.31	.28	86	.53	.48
Cultipack	: 10-foot	1.0	.39	.36	25	.10	.09
Level	: 10-foot	1.5	.33	.32	86	.43	.41
Plant	: 4-row	1.0	.68	.63	68	.46	.43
Plant	: 6-row	1.0	.53	.48	32	.17	.15
Weed, rotary hoe	: 12-foot	1.4	.28	.25	48	.19	.17
Weed by hand	: ---	1.0	4.43	---	25	1.11	---
Weed by hand, contract	: ---	1.0	4.43	---	45	1.99	---
Harrow, spiketooth	: 15-foot	1.2	.28	.25	35	.12	.10
Corrugate	: 4-row	1.0	.46	.42	30	.14	.13
Ditch	: ---	1.0	.34	.21	75	.26	.16
Ditch by hand	: ---	1.0	.47	---	15	.07	---
Cultivate	: 4-row	3.0	.64	.59	68	1.31	1.20
Cultivate	: 6-row	3.0	.51	.46	32	.49	.44
Dust	: 24-foot	1.0	.24	.21	12	.03	.03
Dust, contract	: 24-foot	1.0	.24	.21	30	.07	.06
Irrigate	: ---	3.9	3.25	---	100	12.68	---
Total preharvest	:					22.79	6.37
Cut	: 4-row	1.0	.68	.63	100	.68	.63
Rake, side-delivery	: 7-foot	1.0	.70	.64	100	.70	.64
Combine	: 6-foot	1.0	1.46	1.35	55	.80	.74
Combine, contract	: 6-foot	1.0	1.46	1.35	25	.36	.34
Turn, side-delivery	: 7-foot	1.0	.89	.89	5	.04	.04
Shock by hand	: ---	1.0	4.21	---	15	.63	---
Haul to thresher	: ---	1.0	4.14	1.58	20	.83	.32
Thresh	: 22-inch	1.0	2.46	.50	9	.22	.04
Thresh, contract	: 22-inch	1.0	2.46	.50	11	.27	.06
Haul, truck	: 1½-ton	1.0	.87	1.09	100	.87	---
Total harvest	:					5.40	2.81
Total 1/	:					28.19	9.18

1/ In addition, truck use averaged 1.09 hours an acre.

BROOMCORN: RESOURCES USED IN PRODUCTION, AREA VII-G2, 1949

The data presented here are based on a survey in 1950 of 12 farms producing broomcorn in central Oklahoma. These farms are located in type-of-farming area VII-G2, a cotton and wheat producing area in the Mixed Prairies and Cross Timbers section of Oklahoma.

The farms surveyed averaged 319 acres per farm. In 1949, 159 acres were in crops including 33 acres in broomcorn. The yield of broomcorn averaged about 503 pounds per harvested acre.

Most of the labor used in harvesting was hired by the hour. Tractors provided most of the power used on these farms, although horses were used for some operations. The drawbar-horsepower rating of tractors on these farms ranged from 13 to 21; the most common was about 17.

Materials used and contract work hired, 1949

MATERIALS USED

Item	: Unit	: Quantity : per : acre	: Price : per : unit	: Cost : per : acre	: Average : Acreage : covered	: cost : per acre
		: <u>Number</u>	: <u>Dollars</u>	: <u>Dollars</u>	: <u>Percent</u>	: <u>Dollars</u>
Seed	: Lb.	: 3	0.20	0.60	100	0.60
Wire	: Acre	: 1.0	.30	.30	100	.30
Total materials	:	:				.90

CONTRACT WORK HIRED

Baling	: No.	: 1.5	1.00	1.50	95	1.43
Total contract work	:	:				1.43

Man labor, power, and machinery used by operation in producing and harvesting broomcorn, area VII-G2, central Oklahoma, 1949

Operation	Size of equipment	No. Times: over	Time per acre:			Average time per acre - all farms		
			Man	Power	Pct.	Man	Tractor	Horse
			Hrs.	Hrs.		Hrs.	Hrs.	Hrs.
Plow, moldboard	: 2-14 inch	1.3	1.31	1.25	95	1.62	1.55	---
Plow, moldboard, h.	: 1-14 inch	1.0	3.14	8.98	5	.14	---	0.41
Disk, tandem	: 7-foot	1.0	.47	.45	95	.45	.43	---
Disk, tandem, horses	: 6-foot	1.0	2.20	6.30	5	.10	---	.29
Harrow, spiketooth	: 12-foot	1.2	.25	.23	77	.23	.21	---
Harrow, springtooth	: 9-foot	2.0	.58	.53	18	.21	.19	---
List	: 2-row	1.3	.76	.73	17	.17	.16	---
Plant	: 2-row	1.0	.57	.55	95	.55	.52	---
Plant, horses	: 1-row	1.0	1.57	4.51	5	.07	---	.21
Harrow, spiketooth	: 8-foot	1.0	.30	.28	10	.03	.03	---
Cultivate	: 2-row	3.4	.55	.52	95	1.78	1.68	---
Cultivate, horses	: 1-row	4.0	1.93	5.51	5	.35	---	1.01
Total preharvest	:					5.70	4.77	1.92
Break brooms by hand	: ---	1.0	3.91	---	100	3.91	---	---
Cut brooms by hand	: ---	1.0	9.30	---	100	9.30	---	---
Haul to thresher	: ---	1.0	1.36	.54	95	1.29	.51	---
Haul to thresher, h.	: ---	1.0	.84	.84	5	.04	---	.04
Thresh and shelve	: ---	1.0	3.74	.15	100	3.74	.15	---
Bale and store	: ---	1.0	2.35	.14	5	.12	.01	---
Bale & store, contract	: ---	1.0	2.35	.14	95	2.23	.13	---
Total harvest	:					20.63	.80	.04
Total	:					26.33	5.57	1.96

CORN FOR GRAIN (IRRIGATED): RESOURCES USED IN PRODUCTION,
AREA IX-F2, 1951

The data presented here are based on a survey made in 1951 of approximately 40 farms producing corn under irrigation in 1951 in south-eastern Wyoming and west central Nebraska. These farms are located in type-of-farming area IX-F2, a specialized crop and general farming area along the North Platte and Laramie Rivers. The particular farms surveyed are diversified, producing livestock, hay, corn, small grains, and specialized crops.

The farms averaged about 165 acres per farm. Cropland comprised about 139 acres. In 1951, approximately 24 acres were in corn, and the yield was about 60 bushels per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of the tractors ranged from 14 to 27. There were two common sizes: 16 and 26.

Materials used and contract work hired, 1951

MATERIALS USED

Item	: Unit	: Quantity per acre	: Price per unit	: Cost per acre	: Average Acreage covered	: Average cost per acre
		: Number	: Dollars	: Dollars	: Percent	: Dollars
Seed	: Cwt.	: 0.10	11.75	1.18	100	1.18
Manure	: Ton	: 12	<u>1/</u> 2.00	24.00	11	2.64
Nitrate fertilizer (33-0-0) <u>2/</u>	: Cwt.	: 1.40	4.15	5.81	41	2.38
Spray (2,4-D)	: Pt.	: 1.0	.50	.50	35	.18
Water	: Acre	: 1.0	1.90	1.90	100	1.90
Total materials	:	:				<u>8.28</u>

CONTRACT WORK HIRED

Weeding	: Acre	: 1.0	4.25	4.25	4	.17
Spraying	: Acre	: 1.0	1.50	1.50	11	.16
Picking and hauling	: Acre	: 1.0	5.50	5.50	24	1.32
Total contract work	:	:				<u>1.65</u>

1/ Estimated.

2/ Practically all of mixed fertilizers are applied as a side-dressing either at planting time or in connection with cultivating.

Man labor, power, and machinery used by operation in producing and
harvesting corn for grain, irrigated, area IX-F2, southeastern
Wyoming and west central Nebraska, 1951

Operation	Size	Time per acre:			Average time per		
	of	Times	once over	Acreage	acre - all farms		
	equipment:	over	Man	Power	covered:	Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Apply manure, spreader	: 75-bu.	1.0	6.38	6.38	11	0.70	0.70
Plow, moldboard	: 2-16 inch	1.0	1.26	1.21	60	.76	.73
Plow, moldboard	: 2-14 inch	1.0	1.50	1.43	40	.60	.57
Disk, tandem	: 8-foot	1.2	.55	.50	46	.30	.28
Harrow, springtooth	: 9-foot	1.3	.55	.50	28	.20	.18
Harrow, spiketooth	: 15-foot	1.8	.31	.28	75	.42	.38
Level	: 10-foot	1.4	.47	.45	76	.50	.48
Plant	: 2-row	1.0	.86	.79	73	.63	.58
Plant	: 4-row	1.0	.49	.44	27	.13	.12
Weed, rotary hoe	: 11-foot	1.8	.34	.32	60	.37	.35
Weed by hand	: ---	1.0	6.09	---	6	.37	---
Weed by hand, contract	: ---	1.0	6.09	---	4	.24	---
Cultivate	: 2-row	2.8	.64	.59	100	1.79	1.65
Spray	: 6-row	1.0	.39	.36	24	.09	.09
Spray, contract	: 6-row	1.0	.39	.36	11	.04	.04
Ditch	: ---	1.0	.24	.16	86	.21	.14
Ditch by hand	: ---	1.0	.47	---	10	.05	---
Irrigate	: ---	3.0	3.62	---	100	10.86	---
Total preharvest	:					18.26	6.29
Pick and haul	: 1-row	1.0	1.69	1.55	42	.71	.65
Pick and haul	: 2-row	1.0	.78	.72	26	.20	.19
Pick and haul, contract	: 2-row	1.0	.78	.72	24	.19	.17
Pick by hand and haul	: ---	1.0	11.40	8.91	8	.91	.71
Total harvest	:					2.01	1.72
Total	:					20.27	8.01

CORN FOR GRAIN: RESOURCES USED IN PRODUCTION, AREA II-B4, 1949

The data presented here are based on a survey in 1950 of 28 farms that produced corn for grain. These farms are located in type-of-farming area II-B4, in the Osage-Flint Hills of Kansas and Oklahoma. Stock raising is the most important enterprise in this area.

The farms surveyed averaged 25¹/₄ total acres. In 1949, 87 acres were in crops, including 26 acres of corn for grain. The average yield of corn for grain was approximately 28 bushels per acre.

Tractors provided most of the power used on these farms although horses were used for some operations. The drawbar-horsepower rating of these tractors ranged from 13 to 27; the most common was about 16.

Materials used and contract work hired, 1949

MATERIALS USED

Item	: Unit	: Quantity : per acre	: Price : per unit	: Cost : per acre	: Average : Acreage : covered	: cost : per acre
		: Number	Dollars	Dollars	Percent	Dollars
Home-grown seed	: Bu.	: 0.12	5.30	0.64	15	0.10
Purchased seed	: Bu.	: .12	10.65	1.28	<u>1</u> / 90	1.15
Manure	: Ton	: . 5	<u>2</u> / 2.00	10.00	17	1.70
Mixed fertilizer	: Cwt.	: .75	2.40	1.80	3	.05
Nitrate fertilizer	: Cwt.	: .60	3.85	2.31	2	.05
Phosphate fertilizer	: Cwt.	: .60	3.55	2.13	4	.09.
Spray (2,4-D)	: Gal.	: .04	3.50	.14	5	.01
Total materials	:	:				<u>3.15</u>

CONTRACT WORK HIRED

Picking	: Acre	: 1.0	4.10	4.10	27	<u>1.11</u>
Total contract work	:	:				<u>1.11</u>

1/ Approximately 5 percent of the acreage was replanted.

2/ Estimated.

Man labor, power, and machinery used by operation in producing and
harvesting corn for grain, area II-B⁴, east central Kansas
and north central Oklahoma, 1949

Operation	Size of equipment	Time per acre:			Average time per acre - all farms		
		Times over	once over	Acreage covered	Man	Tractor	Horse
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Apply manure, spreader	: ---	1.0	3.01	1.00	17	0.51	0.17
Plow, moldboard	: 2-14 inch	1.0	1.43	1.36	51	.73	.69
Disk, tandem	: 8-foot	2.7	.60	.57	92	1.49	1.42
Disk, single	: 12-foot	2.0	.40	.38	18	.14	.14
Disk, single, horses	: 7-foot	2.0	.89	3.12	10	.18	---
Harrow, spiketooth	: 12-foot	1.2	.32	.30	18	.07	.06
Plant, lister	: 2-row	1.0	.66	.63	90	.59	.57
Plant, lister, horses	: 1-row	1.0	1.20	3.07	10	.12	---
Replant, lister	: 2-row	1.0	.89	.85	5	.04	.04
Harrow, spiketooth	: 12-foot	1.0	.29	.26	34	.10	.09
Harrow, spiketooth, h.	: 8-foot	1.0	.52	1.24	14	.07	---
Cultivate, first	: 2-row	1.0	.83	.79	89	.74	.70
Cultivate, other	: 2-row	2.4	.66	.63	89	1.41	1.34
Cultivate, first, h.	: 1-row	1.0	1.73	3.30	10	.17	---
Cultivate, other, h.	: 1-row	2.5	1.73	3.30	10	.43	---
Hoe by hand	: ---	1.0	2.66	---	7	.19	---
Spray	: 4-row	1.0	.48	.46	5	.02	.02
Total preharvest	:					7.00	5.24
Pick by machine	: 1-row	1.0	1.08	1.03	22	.24	.23
Pick by machine, c.	: 1-row	1.0	1.23	1.23	27	.33	.33
Haul from picker	: ---	1.0	1.08	1.03	49	.53	.50
Pick by hand & haul, h.	: ---	1.0	4.75	8.80	51	2.42	---
Total harvest	:					3.52	1.06
Total	:					10.52	6.30

CORN FOR GRAIN: RESOURCES USED IN PRODUCTION, AREA III-E3, 1949

The data presented here are based on a 1950 survey of 29 farms that produced corn for grain in 1949. These farms are located in southeastern North Dakota and east-north central South Dakota. This is a transition area between the Corn Belt and the Northern Plains wheat area. Wheat, flax, corn, hay and other feed crops, and livestock are the important products of these farms.

The farms surveyed averaged 502 total acres of which 374 acres were in crops. Corn for grain averaged 88 acres per farm, and the average yield of corn in 1949 was 21 bushels per acre.

Tractors and motorized equipment provided all the power used in producing and harvesting corn, except for a small acreage planted with the use of horses. The drawbar-horsepower rating of tractors on these farms ranged from 10 to 27; the most common was about 19.

Materials used and contract work hired, 1949

MATERIALS USED

Item	: Unit	: Quantity: per acre	: Price : per unit	: Cost : per acre	: Average : Acreage: covered	: Average cost per acre
		: Number	: Dollars	: Dollars	: Percent	: Dollars
Seed corn	: Bu.	: 0.15	11.65	1.75	100	1.75
Sweet clover seed	: Lb.	: 10	.19	1.90	16	.30
Mixed fertilizer	: Cwt.	: .65	3.60	2.34	11	.26
Total materials	:	:				2.31

CONTRACT WORK HIRED

Picking	: Acre	: 1.0	2.95	2.95	7	.21
Total contract work	:	:				.21

Man labor, power, and machinery used by operation in producing and
harvesting corn for grain, area III-E3, southeastern
North Dakota and east-north central
South Dakota, 1949

Operation	Size	Time per acre:			Average time per		
	of	Times	once over	Acreage	acre - all farms		
	equipment:	over	Man	Power	covered:	Man	Tractor
	No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.	
Plow, moldboard	:2-16 inch	1.0	0.98	0.93	31	0.30	0.29
Plow, moldboard	:3-14 inch	1.0	.70	.67	55	.38	.37
Plow, moldboard	:4-14 inch	1.0	.55	.52	13	.07	.07
Harrow, spiketooth	:25-foot	1.9	.13	.12	88	.22	.20
Disk, single	:15-foot	1.3	.29	.28	32	.12	.12
Disk, tandem	:10-foot	1.0	.25	.24	12	.03	.03
Field cultivate	:12-foot	2.2	.23	.22	7	.04	.03
Plant	: 2-row	1.0	.47	.43	32	.15	.14
Plant	: 4-row	1.0	.30	.28	56	.17	.16
Plant, horses	: 2-row	1.0	.64	1.17	12	.08	---
Harrow, spiketooth	:25-foot	1.6	.13	.12	65	.14	.12
Cultivate, first	: 2-row	1.0	.56	.54	75	.42	.40
Cultivate, first	: 4-row	1.0	.34	.32	25	.08	.08
Cultivate, other	: 2-row	2.0	.51	.48	72	.73	.69
Cultivate, other	: 4-row	2.0	.31	.29	25	.16	.14
Total preharvest	:					3.09	2.84
Pick	: 2-row	1.0	.78	.65	71	.55	.46
Pick, contract	: 2-row	1.0	.78	.65	7	.05	.05
Pick	: 1-row	1.0	1.32	1.21	22	.29	.27
Haul from 2-row picker:	---	1.0	1.02	.53	78	.80	.41
Haul from 1-row picker:	---	1.0	1.26	.55	22	.28	.12
Elevate	: ---	1.0	<u>1/</u>	.53	78	<u>1/</u>	.41
Elevate	: ---	1.0	<u>1/</u>	.55	22	<u>1/</u>	.12
Total harvest	:					1.97	1.84
Total <u>2/</u>	:					5.06	4.68

1/ Man-hours included in hauling rates.

2/ In addition, horse work averaged 0.14 hour an acre.

CORN FOR GRAIN (SURFACE-PLANTED): RESOURCES USED IN PRODUCTION, AREA V-A1, 1949

The data presented here are based on a survey of approximately 41 farms in 1950 producing surface-planted corn in western Iowa, northeastern Nebraska, southeastern South Dakota, and northeastern Kansas. These farms are located in type-of-farming area V-A1, a cattle feeding and hog area in the central Missouri River Valley.

The farms surveyed averaged 198 total acres. In 1949, 169 acres were in crops, including 80 acres in corn. The average yield of corn was approximately 49 bushels per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 10 to 27; the most common was about 19.

Materials used and contract work hired, 1949

MATERIALS USED

Item	: Unit	: Quantity : per acre	: Price : per unit	: Cost : per acre	: Average Acreage : covered	: cost per acre
		: Number	: Dollars	: Dollars	: Percent	: Dollars
Seed	: Bu.	: 0.15	11.00	1.65	100	1.65
Sweet clover	: Lb.	: 8	.30	2.40	27	.65
Red clover	: Lb.	: 8	.65	5.20	6	.31
Manure	: Ton	: 6	1/2.00	12.00	20	2.40
Mixed fertilizer	: Cwt.	: 1.25	2.80	3.50	14	.49
Spray (DDT)	: Gal.	: 2	2.00	4.00	3	.12
Spray (2,4-D)	: Pt.	: 1	.80	.80	7	.06
Total materials	:	:				5.68

CONTRACT WORK HIRED

Spraying	: Acre	: 1.0	1.35	1.35	4	.05
Picking	: Acre	: 1.0	4.15	4.15	7	.29
Total contract work	:	:				.34

1/ Estimated.

Man labor, power, and machinery used by operation in producing and harvesting corn for grain, surface-planted, area V-A1, western Iowa, northeastern Nebraska, southeastern South Dakota, and northeastern Kansas, 1949

Operation	: Size : of : equipment:	: Times: : over:	:Time per acre: : once over		:Acreage: : covered:	:Average time per :acre - all farms : Man : Tractor		
	: : :	: : :	<u>No.</u>	<u>Hrs.</u>	<u>Hrs.</u>	<u>Pct.</u>	<u>Hrs.</u>	<u>Hrs.</u>
Cover crop:	:	:	:	:	:	:	:	:
Seed, endgate	: ---	1.0	0.24	0.21	33	0.08	0.07	
Harrow, spiketooth	:20-foot	1.2	.14	.13	22	.04	.03	
Preharvest:	:	:	:	:	:	:	:	:
Load manure-with loader	: ---	1.0	1.19	1.08	12	.14	.13	
Apply manure, spreader	: ---	1.0	1.78	1.62	12	.21	.19	
Apply manure-handload	: ---	1.0	4.00	2.00	8	.32	.16	
Plow, moldboard	:2-14 inch	1.0	1.23	1.18	28	.34	.33	
Plow, moldboard	:2-16 inch	1.0	1.05	1.00	39	.41	.39	
Plow, moldboard	:3-16 inch	1.0	.79	.76	17	.13	.13	
Plow, moldboard	:4-16 inch	1.0	.72	.68	10	.07	.07	
Harrow, spiketooth	:20-foot	2.7	.13	.12	100	.35	.32	
Disk, single	:15-foot	1.8	.24	.23	83	.36	.34	
Harrow, springtooth	:10-foot	1.2	.33	.32	41	.16	.16	
Plant	: 2-row	1.0	.52	.50	65	.34	.32	
Plant	: 4-row	1.0	.29	.28	19	.06	.05	
Plant, horses	: 2-row	1.0	.61	1.17	16	.10	---	
Cultivate, first	: 2-row	1.0	.54	.52	93	.50	.48	
Cultivate, other	: 2-row	2.3	.41	.40	94	.89	.86	
Cultivate	: 4-row	2.4	.25	.24	7	.04	.04	
Spray	: ---	1.0	.24	.21	6	.01	.01	
Spray, contract	: ---	1.0	.24	.21	4	.01	.01	
Hoe and weed	: ---	1.0	.48	---	50	.24	---	
Total preharvest	:	:	:	:	:	4.80	4.09	
Pick by machine	: 2-row	1.0	.77	.74	77	.59	.57	
Pick by machine,contract:	2-row	1.0	.77	.74	7	.05	.05	
Pick by machine	: 1-row	1.0	1.15	1.10	16	.18	.18	
Haul from 2-row picker	: ---	1.0	.67	.67	84	.56	.56	
Haul from 1-row picker	: ---	1.0	1.00	.67	16	.16	.11	
Total harvest	:	:	:	:	:	1.54	1.47	
Total 1/	:	:	:	:	:	6.34	5.56	

1/ In addition, horse work averaged 0.19 hour an acre.

CORN FOR GRAIN (LISTER PLANTED): RESOURCES USED IN PRODUCTION,
AREA V-A1, 1948

The data presented here are taken from a survey made in 1949 by the Department of Agricultural Economics of the University of Nebraska of approximately 53 farms producing lister-planted corn in southeastern Nebraska. These farms are located in type-of-farming area V-A1, a cattle feeding and hog area in the Missouri Valley.

In 1948, 89 acres of lister-planted corn were harvested per farm. The average yield was approximately 57 bushels per acre.

Tractors provide most of the power on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 10 to 27; the most common was about 19.

Materials used and contract work hired, 1948

MATERIALS USED

Item	: Unit	: Quantity: per acre	: Price per unit	: Cost per acre	: Average Acreage: covered	: cost per acre
		: Number	: Dollars	: Dollars	: Percent	: Dollars
Seed corn	: Bu.	: 0.13	10.20	1.33	100	1.33
Fertilizer	: ---	: <u>1/</u>	<u>1/</u>	<u>1/</u>	<u>1/</u>	.24
Spray	: ---	: <u>1/</u>	<u>1/</u>	<u>1/</u>	<u>1/</u>	.17
Total materials	:	:				<u>1.74</u>

1/ Not available.

Man labor, power, and machinery used by operation in producing
and harvesting lister-planted corn, area V-A1,
southeastern Nebraska, 1948 1/

Operation	: Size :	:Time per acre:			:Average time per		
	: of :	:Times:	:once over		:Acreage:	:acre - all farms	
	:equipment:	:over :	Man	Power	:covered:	Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Load manure	: ---	1.0	0.99	0.90	5	0.05	0.04
Apply manure, spreader	:70-bu.	1.0	2.20	2.00	5	.11	.10
Apply manure, hand load	:60-bu.	1.0	3.85	2.08	8	.31	.17
Cut stalks	: 3-row	1.0	.33	.32	25	.08	.08
Disk, single	:12-foot	2.2	.33	.32	82	.60	.58
Disk, tandem	: 8-foot	1.5	.56	.54	22	.18	.18
Plow, moldboard	:2-14 inch	1.0	1.31	1.25	17	.22	.21
Plow, moldboard	:2-16 inch	1.0	1.16	1.10	7	.08	.08
Plow, moldboard	:3-14 inch	1.0	1.07	1.02	6	.06	.06
Harrow, spiketooth	:15-foot	1.7	.23	.21	45	.18	.16
Plant, lister	: 2-row	1.0	.68	.63	100	.68	.63
Replant	: 2-row	1.0	.89	.81	4	.04	.03
Cultivate, kiriler	: 2-row	1.2	.62	.59	62	.46	.44
Cultivate, kiriler	: 4-row	1.2	.25	.24	10	.03	.03
Cultivate, other	: 2-row	2.1	.59	.56	91	1.13	1.07
Cut weeds	: ---	1.0	.54	---	46	.25	---
Spray	:20-foot	1.0	.30	.28	8	.02	.02
Total preharvest	:					4.48	3.88
Pick by machine	: 2-row	1.0	.97	.92	60	.58	.55
Pick by machine	: 1-row	1.0	1.46	1.40	26	.38	.36
Haul from 2-row	: ---	1.0	1.36	.90	60	.82	.54
Haul from 1-row	: ---	1.0	1.32	1.15	26	.34	.30
Hand pick and haul, h.	: ---	1.0	5.70	11.00	14	.80	---
Total harvest	:					2.92	1.75
Total <u>2/</u>	:					7.40	5.63

1/ Adapted from survey records obtained by the Department of Agricultural Economics of the University of Nebraska.

2/ In addition horse work averaged 1.54 hours an acre.

CORN FOR GRAIN: RESOURCES USED IN PRODUCTION, AREA V-F2, 1950

The data presented here are based on a survey made in 1951 of 35 farms producing corn for grain in north central Kansas and south central Nebraska. These farms are located in type-of-farming area V-F2, a livestock and cash grain producing area comprising the southwestern corn-hard winter wheat transition zone.

The farms surveyed averaged about 483 acres per farm. Cropland comprised about 334 acres. In 1950, 87 acres were in corn for grain, and the yield averaged about 36 bushels per acre.

Tractors provided most of the power used on these farms, although horses were used for hauling on farms that picked corn by hand. The drawbar-horsepower rating of tractors ranged from 11 to 41; the most common was about 20.

Materials used and contract work hired, 1950

MATERIALS USED

Item	: Unit	: Quantity: per acre	: Price : per unit	: Cost : per acre	: Average : Acreage: covered	: cost : per acre
		: Number	: Dollars	: Dollars	: Percent	: Dollars
Purchased seed	: Bu.	: 0.10	10.00	1.00	100	1.00
Manure	: Ton	: 9 <u>1/</u>	2.00	18.00	3	.54
Nitrate fertilizer	: Cwt.	: 1.10	3.70	4.07	6	.24
Spray, DDT	: Pt.	: 1.0	1.05	1.05	2	.02
Spray, 2, 4-D	: Pt.	: 1.0	.70	.70	3	.02
Total materials	:	:				1.82

CONTRACT WORK HIRED

Picking	: Acre	: 1.0	3.85	3.85	12	.46
Total contract work	:	:				.46
	:	:				

1/ Estimated.

Man labor, power, and machinery used by operation in producing and
harvesting corn for grain, area V-F2, north central Kansas
and south central Nebraska, 1950

Operation	Size	Times	Time per acre:		Average time per		
	of	over	once over		Acreage: acre - all farms		
	equipment:	over	Man	Power	covered:	Man	Tractor
	No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.	
Apply manure, spreader	: 2-ton	1.0	1.52	0.69	3	0.05	0.02
Cut stalks	: 3-row	1.0	.23	.22	7	.02	.02
Plow, one-way	: 6-foot	1.0	.47	.45	6	.03	.03
Plow, one-way	: 8-foot	1.1	.38	.37	16	.07	.07
Plow, Graham	: 6-foot	1.0	.44	.42	5	.02	.02
Disk, single	: 10-foot	2.2	.36	.35	22	.17	.17
Disk, single	: 15-foot	1.9	.29	.27	55	.30	.28
Disk, tandem	: 10-foot	1.3	.35	.34	3	.01	.01
Fertilize, spreader	: 12-foot	1.0	.41	.36	2	.01	.01
Harrow, spiketooth	: 15-foot	2.5	.22	.20	4	.02	.02
Harrow, springtooth	: 15-foot	1.5	.18	.17	4	.01	.01
Plant, lister	: 2-row	1.0	.53	.48	92	.49	.44
Plant, lister	: 3-row	1.0	.40	.37	8	.03	.03
Harrow, spiketooth	: 15-foot	1.3	.26	.24	6	.02	.02
Weed	: 2-row	1.8	.49	.45	38	.33	.31
Weed	: 4-row	2.2	.30	.27	11	.07	.06
Cultivate	: 2-row	2.1	.52	.47	59	.64	.58
Cultivate	: 4-row	1.6	.36	.33	10	.06	.05
Spray	: 15-foot	1.0	.18	.16	5	.01	.01
Total preharvest	:					2.36	2.16
Pick, mechanical	: 1-row	1.0	1.37	1.25	15	.21	.19
Pick, mechanical	: 2-row	1.0	.83	.76	56	.46	.43
Pick, contract	: 2-row	1.0	.83	.76	12	.10	.09
Haul	: ---	1.0	.99	.82	80	.79	.66
Pick by hand & haul, h.	: ---	1.0	7.02	9.90	17	1.19	---
Total harvest	:					2.75	1.37
Total 1/	:					5.11	3.53

1/ In addition, horse work averaged 1.68 hours an acre.

Picking	:	Acre	:	1.0	3.30	3.30	13	<u>.43</u>
Total contract work	:		:					<u>.43</u>
1/ Estimated.								

Man labor, power, and machinery used by operation in producing and
harvesting corn for grain, area V-F4, northeastern
South Dakota and west central Minnesota, 1949

Operation	: Size	: Time per acre:	:Average time per				
	: of	:Times: once over	:Acreage:	:acre - all farms			
	:equipment:	:over	: Man	: Power	:covered:	: Man	:Tractor
	: No.	:Hrs.	:Hrs.	:Pct.	:Hrs.	:Hrs.	
Load manure	: ---	1.0	1.87	1.63	15	0.28	0.24
Apply manure, spreader	: ---	1.0	.85	.81	15	.13	.12
Apply manure, hand load	: ---	1.0	4.60	2.50	10	.46	.25
Fertilize, spreader	:11-foot	1.0	.53	.48	2	.01	.01
Plow, moldboard	:2-14 inch	1.0	1.21	1.16	45	.54	.52
Plow, moldboard	:3-14 inch	1.0	.89	.85	55	.49	.47
Disk, tandem	:10-foot	1.6	.48	.46	17	.13	.13
Disk, single	:15-foot	1.9	.32	.31	55	.33	.32
Field cultivate	: 9-foot	2.1	.52	.50	43	.47	.45
Cultipack	:15-foot	1.0	.20	.19	8	.02	.02
Plant	: 2-row	1.0	.58	.55	48	.28	.26
Plant	: 4-row	1.0	.33	.32	29	.10	.09
Plant, horses	: 2-row	1.0	.72	1.39	23	.17	---
Cultivate, first	: 2-row	2.5	.61	.58	100	1.52	1.45
Cultivate, other	: 2-row	1.7	.44	.42	72	.54	.51
Hoe	: ---	1.0	.52	---	3	.02	---
Spray	:30-foot	1.3	.15	.13	8	.02	.01
Total preharvest	:	:	:	:	:	5.51	4.85
Pick by machine	: 1-row	1.0	1.29	1.23	43	.55	.53
Pick by machine	: 2-row	1.0	.76	.73	44	.33	.32
Pick by machine, contract	: 2-row	1.0	.76	.73	13	.10	.10
Haul from 1-row	: ---	1.0	1.12	.56	43	.48	.24
Haul from 2-row	: ---	1.0	1.32	.66	57	.75	.38
Total harvest	:	:	:	:	:	2.21	1.57
Total 1/	:	:	:	:	:	7.72	6.42

1/ In addition, horse work averaged 0.32 hour an acre.

CORN FOR GRAIN: RESOURCES USED IN PRODUCTION, AREA V-G1, 1949

The data presented here are based on a survey of approximately 63 corn-producing farms in 1950, in western Missouri and eastern Kansas. These farms are located in type-of-farming area V-G1, a livestock, cash-grain, and dairy area.

The farms surveyed averaged 214 total acres. In 1949, 138 acres were in crops, including 47 in corn. The average yield of corn for grain was 36 bushels per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 11 to 26; the most common was 19.

Materials used and contract work hired, 1949

MATERIALS USED

Item	: Unit	: Quantity : per acre	: Price : per unit	: Cost : per acre	: Average : Acreage : covered	: cost : per acre
		: Number	: Dollars	: Dollars	: Percent	: Dollars
Own seed corn	: Bu.	: 0.11	: 5.20	: 0.57	: 12	: 0.07
Purchased seed corn	: Bu.	: .11	: 10.45	: 1.15	: 88	: 1.01
Manure	: Ton	: 6.0	: 1/2.00	: 12.00	: 10	: 1.20
Mixed fertilizer (4-12-4)	: Cwt.	: 1.20	: 2.20	: 2.64	: 49	: 1.29
Nitrate fertilizer	: Cwt.	: 1.45	: 3.90	: 5.66	: 2	: .11
Phosphate fertilizer	: Cwt.	: .95	: 3.20	: 3.04	: 7	: .21
Spray (2,4-D)	: Gal.	: .1	: 7.00	: .70	: 11	: .08
Total materials	:	:	:	:	:	: 3.97

CONTRACT WORK HIRED

Picking	: Acre:	1.0	4.00	4.00	3	.12
Total contract work	:	:	:	:	:	.12

1/ Estimated.

Man labor, power, and machinery used by operation in producing and
harvesting corn for grain, area V-G1, western Missouri
and eastern Kansas, 1949

Operation	: Size :	:Time per acre:			:Average time per			
	: of :	:Times:	once over		:Acreage:	acre - all farms		
	:equipment:	over :	Man :	Power :	covered:	Man:	Tractor:	Horse
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.	Hrs.
Apply manure, spreaders	:60-bu.	1.0	3.01	0.97	10	0.30	0.10	---
Plow, moldboard	:2-14 inch	1.0	1.17	1.11	94	1.10	1.04	---
Disk, tandem	: 7-foot	1.8	.46	.44	55	.46	.44	---
Disk, single	:10-foot	1.9	.40	.38	38	.29	.27	---
Harrow, spiketooth	:12-foot	1.3	.26	.24	52	.18	.16	---
Plant	: 2-row	1.0	.49	.47	53	.26	.25	---
Plant, horses	: 2-row	1.0	1.05	2.00	28	.29	---	0.56
List and plant	: 2-row	1.0	.68	.66	19	.13	.13	---
Harrow, spiketooth	:16-foot	1.0	.20	.19	19	.04	.04	---
Cultivate, first	: 2-row	1.0	.86	.82	90	.77	.74	---
Cultivate, first, h.	: 1-row	1.0	2.04	3.88	10	.20	---	.39
Cultivate, other	: 2-row	2.2	.58	.55	87	1.11	1.05	---
Cultivate, other, h.	: 1-row	1.7	1.60	3.04	8	.22	---	.41
Spray	:24-foot	1.2	.14	.12	11	.02	.02	---
Total preharvest	:					5.37	4.24	1.36
Pick by machine	: 2-row	1.0	.63	.60	23	.14	.14	---
Pick by machine	: 1-row	1.0	1.33	1.28	42	.56	.54	---
Pick by machine, c.	: 1-row	1.0	1.03	.94	3	.03	.02	---
Haul from picker	: ---	1.0	1.08	1.03	68	.73	.70	---
Pick by hand & haul, h.	: ---	1.0	6.44	10.47	32	2.06	---	3.35
Total harvest	:					3.52	1.40	3.35
Total	:					8.89	5.64	4.71

CORN FOR GRAIN: RESOURCES USED IN PRODUCTION, AREA VI-E1, 1949

The data presented here are based on a survey in 1950 of 30 farms producing corn for grain in central Texas. These farms are located in type-of-farming area VI-E1, a livestock and cash grain area in the Grand Prairie of Texas.

The farms surveyed averaged 380 acres per farm. In 1949, 139 acres were in crops, including 27 acres in corn. The average yield of corn for grain was 25 bushels per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The drawbar-horsepower rating of these tractors ranged from 9 to 26; the most common was about 16.

Materials used and contract work hired, 1949

MATERIALS USED

Item	: Unit	: Quantity per acre	: Price per unit	: Cost per acre	: Average Acreage covered	: Average cost per acre
		: Number	: Dollars	: Dollars	: Percent	: Dollars
Home-grown seed	: Bu.	: 0.11	4.75	0.52	11	0.06
Purchased seed	: Bu.	: .11	7.75	.85	89	.76
Mixed fertilizer	: Cwt.	: 1.90	2.10	3.99	5	.20
Phosphate fertilizer (20%)	: Cwt.	: 2.60	1.60	4.16	9	.37
Phosphate fertilizer (45%)	: Cwt.	: 1.50	3.50	5.25	5	.26
Total materials	:	:				1.65

CONTRACT WORK HIRED

Picking	: Acre:	1.0	4.00	4.00	10	.40
Total contract work	:	:				.40

Man labor, power, and machinery used by operation in producing and harvesting corn for grain, area VI-El, central Texas, 1949

Operation	Size	Time per acre:			Average time per		
	of	Times:	once over	Acreage:	acre - all farms		
	equipment:	over	Man	Power	covered:	Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Plow, disk	: 3-disk	1.2	1.18	1.12	80	1.14	1.07
Plow, one-way	: 8-foot	1.0	.77	.75	17	.13	.13
Disk, tandem	: 7-foot	1.2	.57	.55	29	.20	.19
Harrow, spiketooth	: 8-foot	1.3	.35	.33	16	.07	.07
List	: 2-row	1.6	.66	.63	91	.96	.92
List	: 1-row	2.5	1.84	1.75	4	.18	.18
Plant	: 2-row	1.0	.64	.62	89	.57	.55
Plant	: 1-row	1.0	1.77	1.69	11	.19	.19
Cultivate	: 2-row	2.8	.66	.63	89	1.65	1.57
Cultivate	: 1-row	3.0	1.69	1.62	11	.56	.53
Hoe by hand	: ---	1.1	4.74	---	47	2.45	---
Total preharvest	:					8.10	5.40
Pick by hand	: ---	1.0	5.64	---	78	4.40	---
Pick by machine	: 1-row	1.0	2.51	1.20	12	.30	.14
Pick by machine, contract	: 2-row	1.0	1.48	.85	10	.15	.08
Haul grain	: ---	1.0	1.10	.61	91	1.00	.56
Haul grain, horses	: ---	1.0	4.16	4.76	9	.37	---
Total harvest	:					6.22	.78
Total <u>1/</u>	:					14.32	6.18

1/ In addition, horse work averaged 0.42 hour an acre.

CORN FOR GRAIN: RESOURCES USED IN PRODUCTION, AREA VI-E2, 1949

The data presented here are based on a survey in 1950 of 49 farms producing corn for grain. These farms are located in type-of-farming area VI-E2, a general farming area of southeastern Kansas and northeastern Oklahoma.

The farms surveyed averaged 222 total acres. In 1949, 118 acres were in crops, including 26 acres in corn for grain. The yield of corn for grain averaged about 26 bushels per acre.

Tractors provided most of the power used on these farms although horses were used for some operations. The drawbar-horsepower rating of these tractors ranged from 11 to 26; the most common was about 16.

Materials used and contract work hired, 1949

MATERIALS USED

Item	: Unit	: Quantity: per acre	: Price : per unit	: Cost : per acre	: Average : Acreage: covered	: cost per acre
		: Number	Dollars	Dollars	Percent	Dollars
Home-grown seed	: Bu.	: 0.13	4.50	0.58	62	0.36
Purchased seed	: Bu.	: .13	8.95	1.16	38	.44
Fertilizer(4-12-4)	: Cwt.	: 1.35	2.05	2.77	25	.69
Phosphate fertilizer	: Cwt.	: 1.50	1.90	2.85	4	.11
Spray	: Gal.	: .2	3.05	.61	18	.11
Total materials	:	:				1.71

CONTRACT WORK HIRED

Spraying	: Acre	: 1.0	1.90	1.90	8	.15
Picking	: Acre	: 1.0	3.30	3.30	21	.69
Total contract work	:	:				.84

Man labor, power, and machinery used by operation in producing and
harvesting corn for grain, area VI-E2, southeastern Kansas
and northeastern Oklahoma, 1949

Operation	: Size :	:Time per acre:			:Average time per			
	: of :	Times:	once over	Acreage:	acre - all farms			
	: equipment:over :	Man :	Power :	covered:	Man :	Tractor:	Horse	
:	:	No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.	Hrs.
Plow, moldboard	:2-14 inch	1.0	1.40	1.33	92	1.29	1.22	---
Plow, moldboard, h.	:1-14 inch	1.0	3.66	9.62	6	.22	---	0.58
Disk, tandem	: 7-foot	1.7	.54	.52	53	.49	.47	---
Disk, single	: 9-foot	2.6	.44	.42	44	.50	.48	---
Harrow, spiketooth	:15-foot	1.8	.25	.23	89	.40	.37	---
Plant	: 2-row	1.0	.60	.57	69	.41	.39	---
Plant, horses	: 2-row	1.0	.90	1.72	31	.28	---	.53
Harrow, spiketooth	: 6-foot	1.0	.47	.43	12	.06	.05	---
Cultivate, first	: 2-row	1.0	.70	.67	89	.62	.60	---
Cultivate, first, h.	: 1-row	1.0	1.64	3.12	9	.15	---	.28
Cultivate, other	: 2-row	2.4	.63	.60	87	1.31	1.25	---
Cultivate, other, h.	: 1-row	2.5	1.64	3.12	9	.37	---	.70
Hoe by hand	: ---	1.0	5.49	---	9	.49	---	---
Spray	: 4-row	1.0	.48	.46	10	.05	.05	---
Spray, contract	: 4-row	1.0	.48	.46	8	.04	.04	---
Total preharvest	:					6.68	4.92	2.09
Pick by machine	: 1-row	1.0	.90	.86	17	.15	.15	---
Pick by machine, c.	: 1-row	1.0	.90	.86	21	.19	.18	---
Haul from picker	: ---	1.0	.86	.76	38	.33	.29	---
Husk by hand & haul	: ---	1.0	6.10	9.17	62	3.78	---	5.69
Total harvest	:					4.45	.62	5.69
Total	:					11.13	5.54	7.78

CORN FOR GRAIN: RESOURCES USED IN PRODUCTION, AREA VII-A2, 1949

Data presented here are based on a survey in 1950 of 47 farms producing corn for grain in east central Texas. These farms are located in type-of-farming area VII-A2, a specialized cotton area in the Black Waxy Prairie.

The farms surveyed averaged 216 acres. In 1949, 165 acres were in crops, including 26 acres in corn for grain. The yield of corn averaged about 27 bushels per acre.

Tractors provided most of the power used on these farms although horse-drawn equipment was used for some operations. The drawbar-horsepower rating of the tractors used ranged from 10 to 26; the most common was about 15.

Materials used and contract work hired, 1949

MATERIALS USED

Item	: Unit	: Quantity: per acre	: Price : per unit : Dollars	: Cost : per acre : Dollars	: Average : Acreage: covered: Percent	: cost : per acre : Dollars
		: Number				
Home-grown seed	: Bu.	: 0.12	4.75	0.57	25	0.14
Purchased seed	: Bu.	: .12	9.00	1.08	75	.81
Mixed fertilizer	: Cwt.	: 1.50	2.10	3.15	16	.50
Nitrate fertilizer	: Cwt.	: 1.00	3.85	3.85	4	.15
Superphosphate fertilizer	: Cwt.	: 1.30	1.75	2.28	2	.05
Total materials						1.65

CONTRACT WORK HIRED

Picking	: Acre	: 1.0	3.45	3.45	17	.59
Total contract work						.59

Man labor, power, and machinery used by operation in producing and
harvesting corn for grain, area VII-A2, east central
Texas, 1949

Operation	: Size	: Time per acre:	: Average time per					
	: of	: Times:	once over	: Acreage:	acre - all farms			
	: equipment:	: over	: Man	: Power	: covered:	: Man:	: Tractor:	: Horse
	: No.	: Hrs.	: Hrs.	: Pct.	: Hrs.	: Hrs.	: Hrs.	
Cut stalks	: 2-row	1.0	0.52	0.51	3	0.02	0.02	---
Cut stalks, horses	: 2-row	1.0	1.84	5.26	2	.04	---	0.11
Plow, moldboard	: 2-14 inch	1.0	.97	.92	25	.24	.23	---
Plow, moldboard, horses	: 1-12 inch	1.2	2.42	4.08	5	.14	---	.24
Plow, one-way	: 5-foot	1.3	.74	.70	16	.15	.15	---
Plow, disk	: 3-disk	1.1	1.16	1.00	35	.45	.38	---
List	: 2-row	1.8	.70	.67	62	.78	.75	---
Disk, tandem	: 7-foot	1.0	.42	.40	7	.03	.03	---
Harrow, spiketooth	: 12-foot	1.0	.29	.26	30	.09	.08	---
Lay-off rows	: 2-row	1.0	.64	.61	23	.15	.14	---
Lay-off rows, horses	: 1-row	1.0	2.20	4.20	5	.11	---	.21
Plant	: 2-row	1.0	.69	.66	95	.66	.63	---
Plant, horses	: 1-row	1.0	2.35	4.94	5	.12	---	.25
Sidedress	: 2-row	1.0	.58	.55	3	.02	.02	---
Roll	: 4-row	1.0	.36	.35	9	.03	.03	---
Cultivate	: 2-row	2.8	.61	.58	94	1.61	1.52	---
Cultivate, horses	: 1-row	3.8	1.22	2.91	6	.28	---	.66
Hoe by hand	: ---	1.0	3.87	---	27	1.04	---	---
Total preharvest	:					5.96	3.98	1.47
Pick by machine	: 1-row	1.0	1.38	1.26	6	.08	.08	---
Pick by machine, c.	: 1-row	1.0	1.38	1.26	17	.23	.21	---
Pick by hand	: ---	1.0	5.45	---	66	3.60	---	---
Haul	: ---	1.0	.59	.33	73	.43	.24	---
Haul, horses	: ---	1.0	.77	1.19	11	.08	---	.13
Haul to town, truck	: ---	1.0	.28	.22	5	.01	---	---
Pick by hand & haul	: ---	1.0	4.47	1.95	6	.27	.12	---
Pick by hand & haul, h.	: ---	1.0	7.33	5.33	5	.37	---	.27
Total harvest	:					5.07	.65	.40
Total 1/	:					11.03	4.63	1.87

1/ In addition, truck use averaged 0.01 hour an acre.

CORN FOR GRAIN: RESOURCES USED IN PRODUCTION,
AREA VII-G2, 1949

The data presented here are based on a survey in 1950 of 32 farms producing corn for grain in central Oklahoma. These farms are located in type-of-farming area VII-G2, a cotton and wheat producing area in the Mixed Prairies and Cross Timbers section of Oklahoma.

The farms surveyed averaged 244 acres per farm. In 1949, 114 acres were in crops, including 37 acres in corn for grain. The average yield of corn for grain was about 27 bushels per harvested acre.

Tractors provided most of the power used on these farms, although horses were used for some operations. The drawbar-horsepower rating of tractors on these farms ranged from 10 to 20; the most common was about 15.

Materials used and contract work hired, 1949

MATERIALS USED

Item	: Unit	: Quantity: per acre	: Price: per unit	: Cost: per acre	: Average: Acreage covered	: cost per acre
		: Number	Dollars	Dollars	Percent	Dollars
Home-grown seed	: Bu.	: 0.13	4.25	0.55	7	0.04
Purchased seed	: Bu.	: .13	10.55	1.37	93	1.27
Mixed fertilizer	: Cwt.	: 1.35	2.10	2.84	50	1.42
Total materials	:	:				2.73

CONTRACT WORK HIRED

Picking	: Acre	: 1.0	4.35	4.35	16	.70
Total contract work	:	:				.70
	:	:				

Man labor, power, and machinery used by operation in producing and harvesting corn for grain, area VII-G2, central Oklahoma, 1949

Operation	: Size :	:Time per acre:			: Average time per			
	: of	:Times:	once over	:Acreage:	acre - all farms			
	:equipment:over :	Man	Power	:covered:	Man	Tractor:	Horse	
	: No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.	Hrs.	
Cut stalks	: 1-row	1.0	0.66	0.63	8	0.05	0.05	---
Plow, moldboard	:2-14 inch	1.0	1.28	1.22	93	1.19	1.13	---
Plow, moldboard, h.	:1-12 inch	1.0	5.18	9.89	7	.36	---	0.69
Disk, tandem	: 7-foot	1.4	.58	.61	67	.54	.57	---
Harrow, spiketooth	: 8-foot	1.3	.25	.23	36	.12	.11	---
Harrow, spiketooth, h.	: 7-foot	1.0	.64	1.18	4	.03	---	.05
Harrow, springtooth	: 9-foot	1.4	.59	.54	36	.30	.27	---
List	: 2-row	2.0	.78	.75	6	.09	.09	---
Lay-off rows	: 2-row	1.0	.74	.70	21	.16	.15	---
Lay-off rows, horses	: 1-row	1.0	2.20	4.20	5	.11	---	.21
Plant	: 2-row	1.0	.70	.64	92	.64	.59	---
Plant, horses	: 1-row	1.0	1.24	2.27	8	.10	---	.18
Side-dress, horses	: 1-row	1.0	2.30	4.20	3	.07	---	.13
Cultivate	: 2-row	3.0	.56	.51	80	1.34	1.22	---
Cultivate	: 1-row	3.8	1.38	1.26	12	.63	.57	---
Cultivate, horses	: 1-row	3.2	1.80	3.30	8	.46	---	.84
Hoe by hand	: ---	1.1	5.32	---	63	3.69	---	---
Total preharvest	:					9.88	4.75	2.10
Pick by hand and load	: ---	1.0	4.97	1.89	58	2.88	1.10	---
Pick by machine	: 1-row	1.0	2.17	1.17	26	.56	.30	---
Pick by machine, c.	: 1-row	1.0	1.61	1.13	16	.26	.18	---
Haul	: ---	1.0	.82	.51	72	.59	.37	---
Haul, horses	: ---	1.0	1.94	2.26	24	.47	---	.54
Haul to town, truck	: ---	1.0	.71	.36	4	.03	---	---
Total harvest	:					4.79	1.95	.54
Total 1/	:					14.67	6.70	2.64

1/ In addition, truck use averaged 0.01 hour an acre.

CORN FOR SILAGE: RESOURCES USED IN PRODUCTION, AREA III-E3, 1949

The data presented here are based on a 1950 survey of 45 farms that harvested corn for silage in 1949. These farms are located in south-eastern North Dakota and east-north central South Dakota. This is a transition area between the Corn Belt and the Northern Plains wheat area. Wheat, flax, corn, hay and other feed crops, and livestock are the important products of these farms.

The farms surveyed averaged 503 total acres of which 370 acres were in crops. In 1949, corn for silage averaged 24 acres per farm. The average yield was 4.9 tons per acre.

Tractors and motorized equipment provided most of the power used in producing and harvesting corn for silage. Horses were used to plant about 14 percent of the corn. About 30 percent of the corn was hauled to the cutter with horses. The drawbar-horsepower rating of tractors used on these farms ranged from 10 to 27; the most common was about 19.

Materials used and contract work hired, 1949 ^{1/}

MATERIALS USED

Item	: Unit	: Quantity per acre	: Price per unit	: Cost per acre	: Average acreage covered	: Average cost per acre
		: Number	: Dollars	: Dollars	: Percent	: Dollars
Seed	: Bu.	: 0.16	11.00	1.76	100	1.76
Manure	: Ton	: 9	^{2/} 2.00	18.00	23	4.14
Mixed fertilizer	: Cwt.	: .65	3.90	2.54	4	.10
Spray (2,4-D)	: Pt.	: 1.0	.80	.80	10	.08
Twine	: Lb.	: 2.4	.23	.55	41	.23
Total materials	:	:				6.31

^{1/} Approximately 21 percent of the field chopping was done by contract. An average cost per acre could not be determined from the survey because of the large variety of combinations of labor and equipment included in the contract price, and the variety of methods of payment--usually per acre, hour, ton or foot of silage put into silo. ^{2/} Estimated.

Man labor, power, and machinery used by operation in producing and
harvesting corn for silage, area III-E3, southeastern
North Dakota and east-north central
South Dakota, 1949

Operation	: Size :	:Time per acre:			:Average time per		
	: of :	:Times:	once over	:Acreage:	acre - all farms		
	:equipment:	over	: Man	:Power	:covered:	Man	: Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Apply manure, loader-sp.	: ---	1.0	2.77	1.89	9	0.25	0.17
Apply manure, spreader	: ---	1.0	7.62	5.20	14	1.07	.73
Plow, moldboard	:2-16 inch	1.0	1.06	1.01	36	.38	.36
Plow, moldboard	:3-14 inch	1.0	.79	.76	62	.49	.47
Field cultivate	:10-foot	1.6	.33	.32	21	.11	.11
Disk, single	:15-foot	1.5	.25	.24	24	.09	.09
Disk, tandem	:10-foot	1.1	.33	.32	9	.03	.03
Harrow, spiketooth	:25-foot	2.2	.12	.11	98	.26	.24
Plant	: 2-row	1.0	.50	.46	41	.20	.19
Plant	: 4-row	1.0	.25	.23	45	.11	.10
Plant, horses	: 2-row	1.0	.71	1.30	14	.10	---
Harrow, spiketooth	:25-foot	1.6	.12	.11	42	.08	.07
Cultivate, first	: 2-row	1.0	.60	.57	78	.47	.44
Cultivate, first	: 4-row	1.0	.34	.33	22	.07	.07
Cultivate, other	: 2-row	2.4	.45	.43	66	.71	.68
Cultivate, other	: 4-row	2.3	.20	.19	20	.09	.09
Spray	: ---	1.0	.15	.14	10	.02	.01
Total preharvest	:					4.53	3.85
Field chop 1/	: 1-row	1.0	1.07	.98	59	.63	.58
Haul to silo	: ---	1.0	2.55	1.96	59	1.50	1.16
Blow into silo	: ---	1.0	1.23	.98	59	.73	.58
Bind	: 1-row	1.0	1.64	1.25	29	.48	.36
Bind	: 2-row	1.0	1.00	.65	12	.12	.08
Haul to chopper	: ---	1.0	3.31	1.26	11	.36	.14
Haul to chopper, horses	: ---	1.0	2.69	4.68	30	.81	---
Chop and blow	: ---	1.0	1.58	.54	41	.65	.22
Total harvest	:					5.28	3.12
Total 2/	:					9.81	6.97

1/ Approximately 21 percent done by contract which usually included varying amounts of labor and equipment for hauling and unloading.

2/ In addition, horse work averaged 1.58 hours an acre.

CORN FOR SILAGE: RESOURCES USED IN PRODUCTION,
AREA V-F⁴, 1949

The data presented here are based on a survey made in 1950 of approximately 40 farms producing corn for silage in northeastern South Dakota and west central Minnesota. These farms are located in type-of-farming area V-F⁴, a livestock and cash-grain area in the northwestern Corn Belt fringe.

The farms surveyed averaged 267 total acres per farm. In 1949, 203 acres were in crops, including 12 in corn for silage. The average yield of corn silage was approximately 8 tons per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of the tractors ranged from 15 to 27; the most common was about 20.

Materials used and contract work hired, 1949

MATERIALS USED

Item	: Unit	: Quantity:	Price	: Cost	: Average	
		: per	: per	: per	: Acreage:	cost
		: acre	: unit	: acre	: covered:	per acre
		: Number	Dollars	Dollars	Percent	Dollars
Purchased seed corn	: Bu.	: 0.19	10.05	1.91	100	1.91
Sweet clover seed <u>1/</u>	: Lb.	: 11	.25	2.75	4	.11
Manure	: Ton	: 10	<u>2/</u> 2.00	20.00	28	5.60
Mixed fertilizer	: Cwt.	: 1.00	3.20	3.20	4	.13
Twine	: Lb.	: 3.6	.23	.81	63	.51
Total materials	:	:				8.26

CONTRACT WORK HIRED

Field chopping	: Acre	: 1.0	8.90	8.90	27	2.40
Binding	: Acre	: 1.0	2.85	2.85	11	.31
Chopping and blowing	: Acre	: 1.0	2.45	2.45	16	.39
Total contract work	:	:				3.10

1/ Sweet clover planted the previous year and plowed under in the spring.

2/ Estimated.

Man labor, power, and machinery used by operation in producing and
harvesting corn for silage, area V-F⁴, northeastern
South Dakota and west central Minnesota, 1949

Operation	Size of equipment	Time per acre:			Average time per		
		Times: over	once over		Acreage: covered	acre - all farms	
			Man	Power		Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Apply manure, spreader	: ---	1.0	4.23	1.92	28	1.18	0.54
Plow, moldboard	: 2-14 inch	1.0	1.23	1.18	24	.30	.28
Plow, moldboard	: 2-16 inch	1.0	1.17	1.11	37	.43	.41
Plow, moldboard	: 3-14 inch	1.0	.89	.85	27	.24	.23
Plow, moldboard	: 3-16 inch	1.0	.78	.75	12	.09	.09
Field. cultivate	: 9-foot	2.1	.52	.50	45	.49	.47
Disk, tandem	: 9-foot	1.5	.46	.44	11	.08	.07
Disk, single	: 15-foot	1.4	.32	.31	64	.29	.28
Harrow, spiketooth	: 24-foot	1.9	.13	.12	100	.25	.23
Cultipack	: 17-foot	1.0	.21	.20	9	.02	.02
Plant	: 2-row	1.0	.61	.58	67	.41	.39
Plant	: 4-row	1.0	.32	.31	14	.04	.04
Plant, horses	: 2-row	1.0	.78	1.50	19	.15	---
Harrow, spiketooth	: 24-foot	1.5	.13	.12	100	.20	.18
Cultivate, first	: 2-row	2.4	.60	.57	100	1.44	1.37
Cultivate, other	: 2-row	1.7	.40	.38	61	.41	.39
Total preharvest	:					6.02	4.99
Field chop	: ---	1.0	1.08	.99	10	.11	.10
Field chop, contract	: ---	1.0	1.08	.99	27	.29	.27
Haul	: ---	1.0	2.92	2.43	24	.70	.58
Haul, truck	: ---	1.0	2.16	1.80	13	.28	---
Blow into silo	: ---	1.0	2.62	.99	37	.97	.37
Bind	: 1-row	1.0	1.02	.94	42	.43	.40
Bind	: 2-row	1.0	.67	.62	8	.05	.05
Bind, horses	: 1-row	1.0	2.40	6.60	2	.05	---
Bind, contract	: 1-row	1.0	1.02	.94	11	.11	.10
Haul to chopper	: ---	1.0	4.12	3.26	49	2.02	1.60
Haul to chopper, horses	: ---	1.0	5.15	8.58	14	.72	---
Chop and blow	: ---	1.0	2.62	.94	47	1.23	.44
Chop and blow, contract	: ---	1.0	2.62	.94	16	.42	.15
Total harvest	:					7.38	4.06
Total 1/	:					13.40	9.05

1/ In addition, horse work averaged 1.61 hours an acre and truck use 0.12 hour an acre.

COTTON (IRRIGATED): RESOURCES USED IN PRODUCTION,
AREA VII-A1, 1951

The data presented here are based on surveys made in 1948 and 1952 of farms producing cotton under irrigation. The farms included in these surveys are located in type-of-farming area VII-A1 in the High Plains of Texas. The information on rates of performance and amount of seed used was obtained in 1948 from a survey of 27 farms. The data on the proportion of 2-row and 4-row equipment used, quantity of poison applied, and use of machine strippers were adjusted according to information obtained from a survey of 70 farms in 1952.

The farms surveyed averaged 386 acres in 1947. Cropland per farm averaged 362 acres, including 254 acres of cotton. The average yield was 418 pounds of lint per acre.

Tractors provide all of the power used in producing cotton in this area. On all farms hand labor was used for hoeing, chopping, and pulling cotton.

Materials used and contract work hired, 1951

MATERIALS USED

Item	: Unit	: Quantity: per acre	: Price : per unit	: Cost : per acre	: Average : Acreage: covered	: cost per acre
		: Number	Dollars	Dollars	Percent	Dollars
Home-grown seed	: Lb.	: 33	0.05	1.65	73	1.20
Purchased seed	: Lb.	: 33	.12	3.96	27	1.07
Toxaphene	: Lb.	: 24	.19	4.56	31	1.41
D.D.T.	: Lb.	: 17	.14	2.38	23	.55
BHC 3%, DDT 5%, and 40% sulphur	: Lb.	: 22	.19	4.18	34	1.42
Sulphur	: Lb.	: 19	.05	.95	8	.08
Water	: Acre	: 1.0	5.00	5.00	100	5.00
Total materials	:	:				10.73

CONTRACT WORK HIRED

Airplane spraying	: Acre	: <u>1</u> /1.7	.69	1.17	36	.42
Pulling	: Cwt.	: <u>2</u> /11.9	2.05	24.40	60	14.64
Hauling	: Cwt.	: <u>2</u> /11.9	.25	2.98	8	2.38
Total contract work	:	:				17.44

1/ One acre times average number of times over.

2/ Based on a 1947 yield of 418 pounds per acre.

Man labor, power, and machinery used by operation in producing and
harvesting cotton, irrigated, area VII-A1, west central
Texas, 1951

Operation	: Size :	:Time per acre:			:Average time per		
	: of :	:Times:	once over	:Acreage:	acre - all farms		
	:equipment:	over :	Man	:Power:	covered:	Man : Tractor	
	: No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.	
Cut stalks	: 4-row	1.0	0.13	0.13	77	0.10	0.10
Cut stalks	: 5-row	1.0	.11	.11	18	.02	.02
Plow, one-way	: 9-foot	1.0	.40	.40	28	.11	.11
Plow, Graham	:10-foot	1.7	.25	.25	33	.14	.14
Harrow	:20-foot	1.8	.09	.09	5	.01	.01
List	: 2-row	1.0	.42	.42	4	.02	.02
List	: 3-row	1.0	.31	.31	86	.27	.27
List	: 4-row	1.0	.24	.24	10	.02	.02
Knife	: 3-row	1.3	.22	.22	92	.27	.27
Knife	: 4-row	1.0	.18	.18	4	.01	.01
Cut beds, stalk cutter:	5-row	1.0	.14	.14	10	.01	.01
Cut beds, sand fighter:	9-row	2.4	.08	.08	46	.09	.09
Ditch	: ---	1.0	.12	.12	80	.10	.10
Irrigate	: ---	1.0	2.12	---	80	1.70	---
Plant	: 2-row	1.5	.48	.48	10	.07	.07
Plant	: 4-row	1.5	.26	.26	90	.35	.35
Scratch	: 6-row	1.1	.14	.14	16	.02	.02
Knife	: 2-row	1.5	.38	.38	5	.03	.03
Knife	: 3-row	1.5	.31	.31	5	.02	.02
Knife	: 4-row	1.5	.23	.23	87	.30	.30
Dust	: 8-row	2.8	.07	.07	63	.12	.12
Dust, plane, contract	: ---	1.7	.02	---	36	.01	---
Ditch	: ---	1.6	.15	.15	100	.24	.24
Irrigate	: ---	1.6	1.70	---	100	2.72	---
Chop or hoe	: ---	1.6	2.94	---	100	4.70	---
Total preharvest	:					11.45	2.32
Pull by hand	: ---	2.0	12.40	---	24	5.95	---
Pull by hand, contract:	---	2.0	12.40	---	60	14.88	---
Machine strip	: 2-row	1.0	1.18	.59	1/80	.94	.47
Haul to gin	: ---	1.0	1.25	1.25	92	1.15	1.15
Haul to gin, contract	: ---	1.0	1.25	1.25	8	.10	.10
Total harvest 2/	:					23.02	1.72
Total	:					34.47	4.04

1/ Machine strippers were used exclusively on 16 percent of the farms surveyed and for scraping following hand pulling on 64 percent of the farms.

2/ Based on a 1947 yield of 418 pounds an acre.

COTTON: RESOURCES USED IN PRODUCTION, AREA VII-A1, 1951

The data presented here are based on a survey made in 1948 and 1952. The farms included in these surveys are located in type-of-farming area VII-A1 in the High Plains of Texas. The information on rates of performance and amount of seed used was obtained in 1948 from a survey of 80 cotton-producing farms. The data on the proportion of 2-row and 4-row equipment used, quantity of poison applied, and use of machine strippers were adjusted according to information obtained from a survey of 75 farms in 1952.

The farms surveyed averaged 386 acres in 1947. Cropland per farm averaged 350 acres, including 186 acres of cotton. The average yield was 200 pounds of lint per acre.

Tractors provide all of the power used in producing cotton in this area. On all farms hand labor was used for hoeing, chopping, and pulling cotton.

Materials used and contract work hired, 1951

MATERIALS USED

Item	: Unit	: Quantity: per acre	: Price : per unit	: Cost : per acre	: Average :Acreage: covered: percent	: cost :per acre
		: Number	: Dollars	: Dollars	: Percent	: Dollars
Home-grown seed	: Lb.	: 20	: 0.05	: 1.00	: 73	: 0.73
Purchased seed	: Lb.	: 20	: .12	: 2.40	: 27	: .65
Toxaphene	: Lb.	: 16	: .19	: 3.04	: 32	: .97
D.D.T.	: Lb.	: 18	: .14	: 2.52	: 18	: .45
BHC 3%, DDT 5%, and 40% sulphur	: Lb.	: 27	: .19	: 5.13	: 27	: 1.39
Sulphur dust	: Lb.	: 8	: .05	: .40	: 7	: .03
Total materials						<u>4.22</u>

CONTRACT WORK HIRED

Dusting	: Acre	: 1/ 2.2	: .60	: 1.32	: 6	: .08
Pulling	: Cwt.	: 2/5.50	: 2.15	: 11.82	: 65	: 7.68
Stripping	: Cwt.	: 2/1.60	: 1.10	: 1.76	: 15	: .26
Hauling	: Cwt.	: 2/5.50	: .25	: 1.38	: 4	: .06
Total contract work						<u>8.08</u>

1/ One acre times number of times over.

2/ Based on a 1947 yield of 200 pounds of lint an acre.

Man labor, power, and machinery used by operation in producing and harvesting cotton, area VII-A1, west central Texas, 1951

Operation	Size	Time per acre:			Average time per		
	of	Times:	once over	Acres:	acre - all farms		
	equipment:	over	Man	Power	covered:	Man	Tractor
	No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.	
Cut stalks	4-row	1.0	0.13	0.13	36	0.05	0.05
Cut stalks	5-row	1.0	.11	.11	28	.03	.03
Plow, one-way	8-foot	1.0	.50	.50	7	.04	.04
Plow, Graham	10-foot	1.0	.24	.24	5	.01	.01
Chisel	4-row	1.0	.20	.20	17	.03	.03
List	2-row	1.1	.42	.42	21	.10	.10
List	3-row	1.1	.31	.31	57	.19	.19
List	4-row	1.1	.24	.24	22	.06	.06
Knife	3-row	2.1	.22	.22	59	.27	.27
Knife	4-row	2.4	.18	.18	33	.14	.14
Cut beds, stalk cutter:	4-row	1.2	.17	.17	10	.02	.02
Cut beds, sand fighter:	9-row	2.4	.08	.08	40	.08	.08
Plant	2-row	1.6	.48	.48	9	.07	.07
Plant	4-row	1.6	.26	.26	91	.38	.38
Scratch	5-row	1.1	.13	.13	9	.01	.01
Cultivate	2-row	2.9	.40	.40	5	.06	.06
Cultivate	4-row	3.0	.25	.25	95	.71	.71
Knife	2-row	1.6	.38	.38	11	.07	.07
Knife	4-row	1.7	.23	.23	39	.15	.15
Dust	8-row	2.2	.07	.07	75	.11	.11
Dust, contract	8-row	2.2	.07	.07	6	.01	.01
Chop and hoe	---	1.5	2.50	---	100	3.75	---
Total preharvest	:	:	:	:	:	6.34	2.59
Pull by hand	---	1.7	9.10	---	18	2.78	---
Pull by hand, contract:	---	1.7	9.10	---	65	10.06	---
Machine strip	2-row	1.0	1.18	.59	<u>1/</u> 46	.54	.27
Machine strip, contract:	2-row	1.0	1.18	.59	<u>1/</u> 15	.18	.09
Haul to gin	---	1.0	1.10	1.10	96	1.06	1.06
Haul to gin, contract	---	1.0	1.10	1.10	4	.04	.04
Total harvest <u>2/</u>	:	:	:	:	:	14.66	1.46
Total	:	:	:	:	:	21.00	4.05

1/ Machine strippers were used exclusively on 17 percent of the farms surveyed and for scraping following hand pulling on 44 percent of the farms.

2/ Based on a 1947 yield of 200 pounds of lint an acre.

COTTON: RESOURCES USED IN PRODUCTION, AREA VII-A2, 1951

The data presented here are based on surveys made in 1948 and 1952. The farms included in these surveys are located in type-of-farming area VII-A2 in the Black Prairie of Texas. Information on rates of performance and amount of seed used was obtained from a survey of 176 cotton-producing farms. Data on the proportion of tractors and mules used, the quantity of poison applied, and the proportion of cotton picked and pulled were adjusted according to information from a survey of 80 farms in 1952.

The farms surveyed averaged 140 acres in 1947. Cropland per farm averaged 106 acres including 65 acres of cotton. The average yield was 194 pounds of lint per acre.

Tractors provided most of the power used on these farms. About 95 percent of the farms had tractors although mules were used extensively for several operations. On all farms hand labor was used for hoeing, chopping, and picking cotton.

Materials used and contract work hired, 1951

MATERIALS USED

Item	: Unit	: Quantity: per acre	: Price: per unit	: Cost: per acre	: Average: Acreage: covered	: cost: per acre
		: Number	Dollars	Dollars	Percent	Dollars
Home-grown seed	: Lb.	: 23	0.05	1.15	52	0.60
Purchased seed	: Lb.	: 23	.12	2.76	48	1.32
Toxaphene	: Lb.	: 27	.19	5.13	48	2.46
Aldrien	: Lb.	: 29	.16	4.64	9	.42
Calcium arsenate	: Lb.	: 15	.15	2.25	6	.14
Total materials	: :	: :				4.94

CONTRACT WORK HIRED

Spraying	: Acre	: <u>1</u> /2.4	.50	1.20	9	.11
Picking	: Cwt.	: <u>2</u> /5.90	3.00	17.70	30	5.31
Pulling	: Cwt.	: <u>2</u> /7.90	2.25	17.78	45	8.00
Hauling	: Cwt.	: <u>2</u> /7.10	.50	3.55	34	1.21
Total contract work	: :	: :				14.63

1/ One acre times number of times over.

2/ Based on 1947 average yield of 194 pounds of lint an acre.

Man labor, power, and machinery used by operation in producing and harvesting cotton, area VII-A2, east central Texas, 1951

Operation	: Size	: Times	: Times per acre:		: Average time per			
	: of	: Times:	once over	: Acreage:	acre - all farms			
	: equipment:	over	: Man	: Power	: covered:	Man	: Tractor:	Horse
		<u>No.</u>	<u>Hrs.</u>	<u>Hrs.</u>	<u>Pct.</u>	<u>Hrs.</u>	<u>Hrs.</u>	<u>Hrs.</u>
Cut stalks, 2-mule	: 1-row	1.0	1.20	2.40	5	0.06	---	0.12
Cut stalks	: 2-row	1.0	.35	.35	95	.33	0.33	---
List, 2-mule	: 1-row	2.0	1.68	3.36	5	.16	---	.34
List	: 2-row	2.7	.56	.56	95	1.43	1.43	---
Cultivate beds, 2-mule	: 1-row	1.0	1.28	2.56	5	.06	---	.13
Cultivate beds	: 2-row	1.0	.59	.59	95	.56	.56	---
Plant, 2-mule	: 1-row	1.0	1.57	3.14	5	.08	---	.16
Plant	: 2-row	1.0	.61	.61	95	.58	.58	---
Cultivate, 2-mule	: 1-row	5.0	1.69	3.38	5	.42	---	.84
Cultivate	: 2-row	5.0	.64	.64	95	3.04	3.04	---
Chop & hoe by hand	: ---	2.0	5.18	---	100	10.36	---	---
Spray	: 6-row	2.4	.11	.11	54	.14	.14	---
Spray, contract	: 6-row	2.4	.11	.11	9	.02	.02	---
Total preharvest	:					17.24	6.10	1.59
Pick by hand	: ---	1.0	39.14	---	15	5.87	---	---
Pick by hand, contract:	: ---	1.0	39.14	---	30	11.74	---	---
Pull by hand	: ---	1.0	16.00	---	10	1.60	---	---
Pull by hand, contract:	: ---	1.0	16.00	---	45	7.20	---	---
Haul to gin <u>1/</u>	: ---	1.0	.69	.69	66	.46	---	---
Haul to gin, truck, c.:	: ---	1.0	.69	.69	34	.23	---	---
Total harvest <u>2/</u>	:					27.10	---	---
Total <u>3/</u>	:					44.34	6.10	1.59

1/ Automobile and trailer.

2/ Based on 1947 average yield of 194 pounds of lint an acre.

3/ In addition, automobile use averaged 0.46 hour an acre, and truck use 0.23 hour an acre.

FLAX: RESOURCES USED IN PRODUCTION, AREA II-B1, 1950

The data presented here are based on a survey in 1951 of 24 farms producing flax in type-of-farming area II-B1. This is primarily a livestock area in western South Dakota, but some crops are also produced.

The farms surveyed averaged 1,276 total acres. In 1950 an average of 574 acres were planted in crops, including 57 in flax. The yield of flax averaged about 8 bushels per acre.

Tractors and motorized equipment provide all of the power used in producing flax on these farms. The drawbar-horsepower rating of tractors on these farms ranged from 7 to 36; the most common was about 25.

Materials used and contract work hired, 1950

MATERIALS USED

Item	: Unit	: Quantity: per acre	: Price : per unit	: Cost : per acre	: Average : Acreage: covered:	: cost : per acre
		: Number	Dollars	Dollars	Percent	Dollars
Seed <u>1</u> /	: Bu.	: 0.5	3.50	1.75	100	<u>1.75</u>
Total materials	:	:				1.75

CONTRACT WORK HIRED

Combining	: Acre	: 1.0	4.38	4.38	6	<u>.26</u>
Total contract work	:	:				.26
	:	:				

1/ Approximately 35 percent of the farmers in this area purchased flax seed.

Man labor, power, and machinery used by operation in producing and harvesting flax, area II-B1, western South Dakota, 1950

Operation	: Size	:	:Time per acre:			:Average time per	
	: of	:Times:	once over			Acreage:acre - all farms	
	:equipment:	over	Man	Power	covered:	Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Plow, moldboard	:3-14 inch	1.0	0.55	0.52	60	0.33	0.31
Plow and harrow	:4-14 inch	1.0	.55	.52	17	.09	.09
Disk, tandem	:10-foot	1.3	.25	.24	33	.11	.10
Harrow, spiketooth	:26-foot	1.2	.10	.09	41	.05	.05
Seed, drill	:10-foot	1.0	.22	.20	95	.21	.19
Plow, pack & pony drill:	4-foot	1.0	.53	.50	5	.03	.02
Harrow, spiketooth	:25-foot	1.0	.11	.10	48	.05	.05
Total preharvest	:					.87	.81
Swath	:15-foot	1.0	.22	.20	82	.18	.16
Combine	:12-foot	1.0	.42	.35	70	.29	.24
Combine, s.p.	:12-foot	1.0	.29	.26	24	.07	---
Combine, s.p.,contract	:12-foot	1.0	.30	.28	6	.02	---
Haul grain, truck	: ---	1.0	.29	.16	100	.29	---
Total harvest	:					.85	.40
Total <u>1/</u>	:					1.72	1.21

1/ In addition, truck use averaged 0.16 hour an acre and self-propelled combines 0.08 hour an acre.

FLAX: RESOURCES USED IN PRODUCTION, AREA III-A2, 1950

Data presented here are based on a survey in 1951 of 35 farms that produced flax. These farms are located in type-of-farming area III-A2 in central North Dakota and north central South Dakota. This is a specialized wheat area although other small grains and livestock also are produced.

The farms surveyed averaged 713 acres. In 1950, an average of 495 acres were in crops, including 42 acres in flax. The yield of flax averaged about 7.5 bushels per acre.

Tractors and motorized equipment provided most of the power used in producing flax on these farms although horses were used for hauling bundles on farms where flax was threshed. The drawbar-horsepower rating of tractors on these farms ranged from 7 to 37; the most common was about 20.

Materials used and contract work hired, 1950

MATERIALS USED

Item	: Unit	: Quantity: per acre	: Price : per unit	: Cost : per acre	: Average : Acreage: covered	: cost : per acre
		: Number	Dollars	Dollars	Percent	Dollars
Seed <u>1</u> /	: Bu.	: 0.74	6.55	4.85	100	4.85
Twine	: Lb.	: 2.5	.23	.58	7	.04
Total materials						4.89

CONTRACT WORK HIRED

Combining	: Acre	: 1.0	3.00	3.00	4	0.12
Threshing	: Bu.	: 7.5	.26	1.95	4	.08
Total contract work						.20

1/ Approximately 8 percent of the farmers in this area purchased flax seed.

Man labor, power, and machinery used by operation in producing and
harvesting flax, area III-A2, central North Dakota and
north central South Dakota, 1950

Operation	Size	Time per acre:			Average time per		
	of	Times:	once over		Acreage:	acre - all farms	
	equipment:	over	Man	Power	covered:	Man	Tractor
	No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.	
Plow, moldboard	:3-14 inch	1.0	0.76	0.72	51	0.39	0.37
Disk, single	:21-foot	1.0	.11	.10	7	.01	.01
Disk, tandem	:10-foot	1.0	.28	.26	4	.01	.01
Harrow, spiketooth	:24-foot	1.8	.12	.12	48	.11	.11
Harrow, springtooth	: 8-foot	1.0	.55	.52	2	.01	.01
Plow and cultipack	: 4-foot	1.0	.66	.63	3	.02	.02
Seed, drill	:11-foot	1.0	.28	.25	53	.15	.13
Plow, pack & pony drill	: 4-foot	1.0	.60	.55	47	.28	.26
Harrow, spiketooth	:24-foot	1.0	.14	.14	30	.04	.04
Total preharvest	:					1.02	.96
Swath	:12-foot	1.0	.24	.23	87	.21	.20
Combine	: 9-foot	1.0	.50	.46	89	.45	.41
Combine, s.p., contract	: 9-foot	1.0	.40	.36	4	.02	---
Bind	: 9-foot	1.0	.94	.50	7	.07	.04
Shock	: ---	1.0	1.39	---	7	.10	---
Haul bundles, horses	: ---	1.0	1.68	2.30	7	.12	---
Thresh	:28-inch	1.0	.46	.41	3	.01	.01
Thresh, contract	: ---	1.0	.46	.41	4	.02	.02
Haul	: ---	1.0	.38	.21	10	.04	.02
Haul, truck	: ---	1.0	.38	.23	70	.27	---
Haul to mill, truck	: ---	1.0	.22	.14	20	.04	---
Total harvest	:					1.35	.70
Total <u>1/</u>	:					2.37	1.66

1/ In addition, self-propelled combines averaged 0.01 hour an acre, truck use 0.19 hour an acre, and horse use 0.16 hour an acre.

FLAX: RESOURCES USED IN PRODUCTION, AREA III-A3, 1947

The data presented here are based on a survey made in 1948 of 46 farms ranging in size from 340 to 700 acres. In this group there were 31 farms that produced flax in 1947. These farms are primarily crop farms located in central and northern North Dakota. Production of wheat, barley, and oats is also important on these farms.

The farms that produced flax averaged 516 acres. Cropland averaged 429 acres per farm. In 1947, 51 acres of flax were harvested. There was no abandonment or failure of flax in 1947, and the average yield was 7 bushels per acre.

Tractors provided most of the power used in the production of flax. Trucks were used to haul the flaxseed from the combines and threshers, and horses were used to haul bundles on a few farms where flax was threshed. The drawbar-horsepower rating of tractors used on these farms ranged from 10 to 32. The most common was about 21.

Materials used and contract work hired, 1947

MATERIALS USED

Item	: Unit	: Quantity per acre	: Price per unit	: Cost per acre	: Average Acreage covered	: Average cost per acre
		: Number	: Dollars	: Dollars	: Percent	: Dollars
Home-grown seed	: Bu.	: 0.6	7.30	4.38	40	1.75
Purchased seed	: Bu.	: .6	8.70	5.22	60	3.13
Twine	: Lb.	: 2.0	.23	.46	13	.06
Total materials	:	:				4.94

CONTRACT WORK HIRED

Cleaning & treating seed	: Bu.	: .6	.19	.11	27	.03
Combining	: Acre	: 1.0	4.10	4.10	28	1.56
Total contract work	:	:				1.59

Man labor, power, and machinery used by operation in producing and
harvesting flax, area III-A3, central and northern
North Dakota, 1947

Operation	: Size :	:Time per acre:			:Average time per		
	: of :	:Times:	once over		:Acreage:	acre - all farms	
	:equipment:	:over :	Man	Power	:covered:	Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Flow, moldboard	:3-14 inch	1.0	0.88	0.84	39	0.34	0.33
Flow and pack	:3-14 inch	1.0	.91	.87	21	.19	.18
Disk	:10-foot	1.6	.34	.33	17	.09	.09
Field cultivate	:10-foot	1.4	.34	.33	22	.11	.10
Harrow, spiketooth	:26-foot	1.5	.14	.13	36	.08	.07
Drill	:12-foot	1.0	.28	.26	56	.16	.15
Flow, pack & pony drill	:42-inch	1.0	.86	.82	40	.34	.33
Disk, drill and harrow	:10-foot	1.0	.39	.37	4	.02	.01
Harrow, spiketooth	:26-foot	1.0	.14	.13	21	.03	.03
Cultipack	:11-foot	1.0	.37	.35	3	.01	.01
Total preharvest	:					1.37	1.30
Windrow	:12-foot	1.0	.34	.30	48	.16	.14
Combine	: 6-foot	1.0	.90	.66	28	.25	.18
Combine	:12-foot	1.0	.67	.44	31	.21	.14
Combine, contract	:12-foot	1.0	.67	.44	28	.19	.12
Haul from combine, t.	: ---	1.0	.36	.26	87	.31	---
Bind	: 8-foot	1.0	.84	.55	13	.11	.07
Shock by hand	: ---	1.0	.60	---	7	.04	---
Haul bundles, horses	: ---	1.0	1.83	3.06	13	.24	---
Thresh	:32-inch	1.0	.37	.34	13	.05	.04
Haul grain	: ---	1.0	.74	.34	13	.10	.04
Total harvest	:					1.66	.73
Total <u>1/</u>	:					3.03	2.03

1/ In addition, horse work averaged 0.40 hour an acre and truck use 0.23 hour an acre.

FLAX: RESOURCES USED IN PRODUCTION, AREA III-C2, 1950

The data presented here are based on a survey made in 1951 of 23 farms producing flax. These farms are located in type-of-farming area III-C2, a wheat and range-livestock area in northeastern Montana and southwestern North Dakota.

The farms surveyed averaged 1,601 acres per farm. Cropland comprised about 889 acres. In 1950, 75 acres were in flax, and the yield averaged about 5 bushels per acre.

Tractors provided most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 14 to 37; the most common was about 26.

Materials used and contract work hired, 1950

MATERIALS USED

Item	: Unit	: Quantity: : per : acre	: Price : : per : unit	: Cost : : per : acre	: Average : Acreage: : covered:	: cost : per acre
		: Number	Dollars	Dollars	Percent	Dollars
Home-grown seed	: Bu.	: 0.4	3.90	1.56	87	1.36
Purchased seed	: Bu.	: .4	4.00	1.60	13	.21
Total materials	:	:				1.57

CONTRACT WORK HIRED

Combining	: Acre	: 1.0	3.00	3.00	4	.12
Total contract work	:	:				.12
	:	:				

Man labor, power, and machinery used by operation in producing and
harvesting flax, area III-C2, northeastern Montana and
southwestern North Dakota, 1950

Operation	Size	Time per acre:			Average time per		
	of	Times:	once over		Acreage:acre - all farms		
	equipment:	over	Man	Power	covered:	Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Plow, moldboard	:4-14 inch	1.0	0.63	0.55	61	0.38	0.34
Disk, tandem	:10-foot	1.7	.23	.22	48	.19	.18
Harrow, spiketooth	:25-foot	1.7	.12	.12	25	.05	.05
Cultipack	:10-foot	1.0	.24	.23	10	.02	.02
Seed, drill	:12-foot	1.0	.22	.20	57	.13	.11
Drill and cultipack	:10-foot	1.0	.26	.24	23	.06	.06
Plow, pack and pony drill	: 5-foot	1.0	.77	.70	20	.15	.14
Harrow, spiketooth	:25-foot	1.0	.12	.12	10	.01	.01
Total preharvest	:					.99	.91
Windrow	:14-foot	1.0	.23	.22	38	.09	.08
Combine	:12-foot	1.0	.36	.30	96	.35	.29
Combine, contract	:12-foot	1.0	.36	.30	4	.01	.01
Haul grain, truck	: ---	1.0	.32	.16	100	.32	---
Total harvest	:					.77	.38
Total <u>1/</u>	:					1.76	1.29

1/ In addition, truck use averaged 0.16 hour an acre.

FLAX: RESOURCES USED IN PRODUCTION, AREA III-E3, 1949

The data presented here are based on a 1950 survey of 30 farms that produced flax in 1949. These farms are located in southeastern North Dakota and east-north central South Dakota. This is a transition area between the Corn Belt and the Northern Plains wheat area. Wheat, flax, corn, hay and other feed crops, and livestock are important products of these farms.

The farms surveyed averaged 530 total acres of which 350 were in crops. In 1949, the planted acreage of flax averaged 59 per farm and harvested acreage averaged 57. The average yield of flax was 5.8 bushels per harvested acre.

Tractors and motorized equipment provided most of the power used on these farms. They were used for all operations except hauling bundles to the threshers on some farms. The drawbar-horsepower rating of tractors on these farms ranged from 10 to 27; the most common was about 19.

Materials used and contract work hired, 1949 ^{1/}

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Average Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Seed ^{2/}	Bu.	0.7	5.80	4.06	100	4.06
Seed cleaning	Bu.	.7	.50	.35	11	.04
Twine	Lb.	2.2	.23	.51	25	.13
Total materials						4.23

^{1/} No contract work was reported on farms surveyed in this area.

^{2/} Approximately 23 percent of the farmers in this area purchased flax seed.

Man labor, power, and machinery used by operation in producing and harvesting flax, area III-E3, southeastern North Dakota and east-north central South Dakota, 1949

Operation	: Size :	:Time per acre:			:Average time per		
	: of :	:Times:	once over		:Acreage:	acre - all farms	
	:equipment:	over :	Man :	Power :	covered:	Man :	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Plow, moldboard	:2-16 inch	1.0	1.09	1.04	21	0.23	0.22
Plow, moldboard	:3-14 inch	1.0	.82	.79	36	.30	.28
Plow, moldboard	:4-14 inch	1.2	.62	.59	36	.27	.25
Disk, single	:15-foot	1.7	.26	.25	48	.21	.20
Disk, tandem	: 9-foot	1.5	.38	.36	21	.12	.11
Harrow, spiketooth	:26-foot	2.2	.14	.13	100	.31	.29
Field cultivate	: 9-foot	3.0	.38	.38	34	.39	.39
Haul seed to field, t.	: ---	1.0	.02	.02	84	.02	---
Seed, drill	:11-foot	1.0	.30	.28	100	.30	.28
Cultipack	: 9-foot	1.0	.46	.44	6	.03	.03
Total preharvest	:					2.18	2.05
Windrow	:12-foot	1.0	.28	.25	75	.21	.19
Combine	: 6-foot	1.0	.58	.53	42	.24	.22
Combine, s.p.	:12-foot	1.0	.29	.26	33	.10	---
Haul from combine, t.	: ---	1.0	.29	.22	75	.22	---
Bind	:10-foot	1.0	.62	.44	25	.16	.11
Shock by hand	: ---	1.0	.47	---	11	.05	---
Haul bundles, horses	: ---	1.0	1.21	1.90	25	.30	---
Thresh	:28-inch	1.0	.28	.26	25	.07	.06
Haul grain	: ---	1.0	.28	.18	25	.07	.04
Elevate grain	: ---		.28	.12	25	.07	.03
Total harvest	:					1.49	.65
Total <u>1/</u>	:					3.67	2.70

1/ In addition, horse work averaged 0.48 hour an acre, self-propelled combine 0.09 hour an acre, and truck use 0.18 hour an acre.

FLAX: RESOURCES USED IN PRODUCTION, AREA V-A1, 1949

The data presented here are based on a survey of approximately 43 farms in 1950, producing flax in western Iowa, eastern Nebraska, southeastern South Dakota, and northeastern Kansas. These farms are located in type-of-farming area V-A1, a cattle feeding and hog area in the Missouri River Valley.

The farms surveyed averaged 319 total acres. In 1949, 273 acres were in crops, including 47 acres in flax. The average yield of flax was approximately 13 bushels per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 10 to 27; the most common was about 19.

Materials used and contract work hired, 1949

MATERIALS USED

Item	: Unit	: Quantity: per acre	: Price: per unit	: Cost: per acre	: Average: Acreage: covered	: Average: cost per acre
		: Number	: Dollars	: Dollars	: Percent	: Dollars
Seed ^{1/}	: Bu.	: 1.0	7.15	7.15	100	7.15
Ceresan	: Bu.	: 1.0	.09	.09	21	.02
Manure	: Ton	: 5	2/2.00	10.00	6	.60
Mixed fertilizer (4-16-0)	: Cwt.	: 1.80	1.90	3.42	9	.31
Nitrate fertilizer(33-0-0)	: Cwt.	: 1.20	3.60	4.32	2	.09
Spray (2,4-D)	: Gal.	: .1	7.30	.73	32	.23
Twine	: Lb.	: 2.2	.24	.53	9	.05
Total materials	:	:				8.45

CONTRACT WORK HIRED

Seed treating	: Bu.	: 1.0	.36	.36	12	.04
Windrowing	: Acre	: 1.0	1.20	1.20	14	.17
Combining	: Acre	: 1.0	4.25	4.25	14	.60
Threshing	: Bu.	: 13	.14	1.82	7	.13
Total contract work	:	:				.94

^{1/} Approximately 48 percent of the farmers in this area purchased flax seed.

^{2/} Estimated.

Man labor, power, and machinery used by operation in producing and harvesting flax, area V-A1, western Iowa, eastern Nebraska, southeastern South Dakota, and northeastern Kansas, 1949

Operation	Size	Time per acre:	Average time per	
	of	once over	acre - all farms	
	equipment:	Man	Power	covered:
	No.	Hrs.	Hrs.	Pct.
Apply manure, spreader	---	1.0	1.43	0.65
Fertilize, endgate, sp.	---	1.0	.52	.40
Plow, moldboard	:3-14 inch	1.0	.78	.75
Disk, single	:15-foot	3.6	.21	.20
Disk, tandem	:10-foot	1.3	.23	.22
Harrow	:25-foot	2.0	.14	.13
Field cultivate	:12-foot	1.0	.32	.31
Clean and treat seed	: ---	1.0	.12	---
Treating seed, contract	: ---	1.0	.12	---
Seed, drill	:12-foot	1.0	.30	.29
Seed, endgate	: ---	1.0	.32	.20
Seed endgate, horses	: ---	1.0	.22	.41
Roll	:15-foot	1.0	.21	.20
Spray	:24-foot	1.0	.34	.26
Pull or cut weeds	: ---	1.0	.43	---
Total preharvest	:			
	:			
Windrow	:10-foot	1.0	.32	.31
Windrow, contract	:10-foot	1.0	.32	.31
Combine	: 6-foot	1.0	.68	.65
Combine	:12-foot	1.0	.44	.42
Combine, self-propelled	:10-foot	1.0	.43	.37
Combine, s.p., contract	:10-foot	1.0	.43	.37
Haul from combine	: ---	1.0	.33	.33
Bind	: 8-foot	1.0	1.28	.62
Shock by hand	: ---	1.0	1.77	---
Haul bundles	: ---	1.0	1.59	1.52
Haul bundles, horses	: ---	1.0	1.54	2.73
Thresh	:28-inch	1.0	.41	.36
Thresh, contract	:28-inch	1.0	.41	.36
Haul grain, horses	: ---	1.0	.58	.73
Haul grain	: ---	1.0	.34	.33
Total harvest	:			
	:			
Total 1/	:			

1/ In addition, horse work averaged 0.25 hour an acre and self-propelled combines averaged 0.13 hour an acre.

FLAX: RESOURCES USED IN PRODUCTION, AREA V-F4, 1949

The data presented here are based on a survey made in 1950 of approximately 43 farms producing flax in 1949 in northeastern South Dakota and west central Minnesota. These farms are in type-of-farming area V-F4, a livestock and cash-grain area on the northwestern fringe of the Corn Belt.

The farms surveyed averaged 363 total acres per farm. In 1949, approximately 301 acres were in crops, including 52 in flax. The average yield of flax was about 10 bushels per acre.

Tractors provide most of the power used on these farms. They were used for operations listed in the following tables unless otherwise indicated. The D.B.H.P. rating of the tractors ranged from 15 to 27; the most common was about 20.

Materials used and contract work hired, 1949

MATERIALS USED

Item	: Unit	: Quantity per acre	: Price per unit	: Cost per acre	: Average Acreage covered	: Average cost per acre
		: Number	: Dollars	: Dollars	: Percent	: Dollars
Seed <u>1/</u>	: Bu.	: 0.8	6.10	4.88	100	4.88
Ceresan	: Bu.	: .8	.03	.02	21	.01
Manure	: Ton	: 4	2/2.00	8.00	2	.16
Mixed fertilizer	: Cwt.	: 2.00	3.40	6.80	2	.14
Spray (2,4-D)	: Pt.	: 1.0	.67	.67	15	.10
Twine	: Lb.	: 2.4	.23	.55	31	.17
Total materials	:	:				5.46

CONTRACT WORK HIRED

Cleaning & treating seed:	Bu.	: .8	.15	.12	26	.03
Windrowing	: Acre	: 1.0	1.15	1.15	5	.06
Threshing	: Bu.	: 10	.13	1.30	21	.27
Total contract work	:	:				.36

1/ Approximately 39 percent of the farmers in this area purchased flax seed.

2/ Estimated.

Man labor, power, and machinery used by operation in producing and
harvesting flax, area V-F⁴, northeastern South Dakota
and west central Minnesota, 1949

Operation	: Size : of : equipment:	: Times: : over : : No.	:Time per acre:			:Average time per	
			: once over :Acreage:			:acre - all farms	
			Man	Power	covered	Man	Tractor
			Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Apply manure, spreader	: ---	1.0	1.44	1.25	1	0.01	0.01
Apply manure, loader-sp.	: ---	1.0	1.31	1.14	1	.01	.01
Fertilize, spreader	:10-foot	1.0	.34	.33	2	.01	.01
Plow, moldboard	:2-14 inch	1.0	1.22	1.17	23	.28	.27
Plow, moldboard	:3-14 inch	1.0	.86	.82	48	.41	.39
Plow, moldboard	:4-14 inch	1.0	.69	.66	15	.10	.10
Disk, tandem	: 9-foot	1.3	.39	.37	6	.03	.03
Disk, single	:15-foot	1.8	.24	.23	54	.23	.22
Field cultivate	: 9-foot	1.0	.41	.40	23	.09	.09
Harrow, spiketooth	:25-foot	2.0	.12	.11	100	.24	.22
Roll	:12-foot	1.0	.26	.25	15	.04	.04
Clean and treat seed	: ---	1.0	.14	---	21	.03	---
Drill	:11-foot	1.0	.31	.29	100	.31	.29
Harrow, spiketooth	:25-foot	1.2	.12	.11	100	.14	.13
Weed by hand	: ---	1.0	.45	---	3	.01	---
Spray	:30-foot	1.0	.20	.16	15	.03	.02
Total preharvest	:					1.97	1.83
Windrow	:10-foot	1.0	.34	.33	64	.22	.21
Windrow, contract	:10-foot	1.0	.34	.33	5	.02	.02
Combine	: 6-foot	1.0	.61	.56	43	.26	.24
Combine, self-propelled	:12-foot	1.0	.36	.33	26	.09	---
Haul from combine	: ---	1.0	.29	.20	39	.11	.08
Haul from combine, truck	:1½-ton	1.0	.26	.18	30	.08	---
Bind	: 8-foot	1.0	.97	.50	18	.17	.09
Bind	:10-foot	1.0	.91	.46	13	.12	.06
Shock	: ---	1.0	.68	---	29	.20	---
Haul bundles	: ---	1.0	1.20	.65	17	.20	.11
Haul bundles, horses	: ---	1.0	1.78	3.10	14	.25	---
Thresh	:24-inch	1.0	.33	.32	10	.03	.03
Thresh, contract	:24-inch	1.0	.33	.32	21	.07	.07
Haul grain, truck	: ---	1.0	.28	.21	12	.03	---
Total harvest	:					1.85	.91
Total 1/	:					3.82	2.74

1/ In addition, horse work averaged 0.43 hour an acre, truck use 0.08 hour an acre, and self-propelled combine 0.09 hour an acre.

GRAIN SORGHUM: RESOURCES USED IN PRODUCTION, AREA II-B⁴, 1949

The data presented here are based on a survey in 1950 of 33 farms that produced grain sorghum. These farms are located in type-of-farming area II-B⁴, in the Osage-Flint Hills of Kansas and Oklahoma. Stock raising is the most important enterprise in this area.

The farms surveyed averaged 439 total acres. In 1949, 175 acres were in crops, including 29 acres in grain sorghum. The average yield of grain sorghum was approximately 31 bushels per acre.

Tractors provided most of the power used on these farms although horse-drawn planters were used for 3 percent of the total acreage planted. The drawbar-horsepower rating of these tractors ranged from 12 to 25; the most common was about 17.

Materials used and contract work hired, 1949

MATERIALS USED

Item	: Unit	: Quantity: per acre	: Price : per unit	: Cost : per acre	: Average : Acreage: covered: per acre
		: <u>Number</u>	<u>Dollars</u>	<u>Dollars</u>	<u>Percent</u> <u>Dollars</u>
Seed ^{1/}	: Bu.	: 0.15	2.40	0.36	^{2/} 120 0.43
Manure	: Ton	: 6	^{3/} 2.00	12.00	7 .84
Fertilizer (4-12-4)	: Cwt.	: 1.00	2.25	2.25	2 .04
Nitrate fertilizer	: Cwt.	: .75	3.50	2.62	12 .31
Phosphate fertilizer	: Cwt.	: .80	3.50	2.80	11 .31
Spray	: Gal.	: .1	7.30	.73	11 .08
Twine	: Lb.	: 2.7	.23	.62	45 .28
Total materials	:	:			2.29

CONTRACT WORK HIRED

Combining	: Acre	: 1.0	2.84	2.84	5 .14
Binding	: Acre	: 1.0	2.08	2.08	8 .17
Threshing with combine	: Bu.	: 31	.11	3.41	11 .38
Total contract work	:	:			.69

^{1/} Approximately 42 percent of the farmers in this area purchased grain sorghum seed.

^{2/} Approximately 20 percent of the acreage was replanted.

^{3/} Estimated.

Man labor, power, and machinery used by operation in producing and
harvesting grain sorghum, area II-B⁴, east central Kansas
and north central Oklahoma, 1949

Operation	Size	Time per acre:			Average time per		
	of	Times:	once over		Acreage:	acre - all farms	
	equipment:	over	Man	Power	covered:	Man	Tractor
	No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.	
Apply manure, spreader	---	1.0	3.01	1.00	7	0.21	0.07
Plow, moldboard	: 2-14 inch	1.0	1.48	1.42	47	.70	.67
Disk, tandem	: 7-foot	2.1	.49	.47	77	.79	.76
Disk, single	: 8-foot	3.2	.54	.52	13	.22	.22
Harrow, spiketooth	: 14-foot	1.2	.26	.24	32	.10	.09
Plant	: 2-row	1.0	.77	.74	97	.75	.72
Plant, horses	: 2-row	1.0	1.46	2.79	3	.04	---
Replant	: 2-row	1.0	1.04	.99	20	.21	.20
Harrow, spiketooth	: 16-foot	1.1	.29	.26	72	.23	.21
Cultivate	: 2-row	2.4	.69	.66	97	1.61	1.53
Spray	: 6-row	1.0	.21	.20	11	.02	.02
Total preharvest	:					4.88	4.49
Combine, power take-off:	5-foot	1.0	1.02	.98	50	.51	.49
Combine, contract	: 5-foot	1.0	1.02	.98	5	.05	.05
Haul from combine, t.	: 1½-ton	1.0	.98	.98	55	.54	---
Bind	: 1-row	1.0	1.60	1.47	37	.59	.54
Bind, contract	: 1-row	1.0	1.60	1.47	8	.13	.12
Shock by hand	: ---	1.0	3.89	---	45	1.75	---
Thresh (with combine)	: 5-foot	1.0	2.83	1.18	34	.96	.40
Thresh (with combine)c.	: 5-foot	1.0	2.83	1.18	11	.31	.13
Haul from combine, t.	: 1½-ton	1.0	1.18	1.18	45	.53	---
Total harvest	:					5.37	1.73
Total <u>1</u> /	:					10.25	6.22

1/ In addition, horse work averaged 0.08 hour an acre and truck use averaged 1.07 hours an acre.

GRAIN SORGHUM: RESOURCES USED IN PRODUCTION, AREA III-D1, 1948

The data presented here are based on a survey of 164 farms in 1949. About 110 of these farms produced grain sorghum in 1948. These farms are in the High Plains area of the Panhandle of Texas and Oklahoma and in southwestern Kansas. Crop production, primarily wheat and grain sorghum, is the most important enterprise on these farms.

The farms surveyed averaged 719 total acres. In 1948, about 595 acres were in cropland, including 167 acres of fallow, failure, idle and rotation pasture. The farmers growing grain sorghum had planted an average of 209 acres per farm in 1948. About 184 acres were harvested per farm and the average yield was about 17 bushels per harvested acre.

These farms are highly mechanized, and tractors and motorized equipment provide all the power used in the production of grain sorghum. The drawbar-horsepower rating of these tractors ranged from 11 to 36; the most common was about 23.

Materials used and contract work hired, 1948

MATERIALS USED

Item	: Unit	: Quantity: per acre	: Price : per unit	: Cost : per acre	: Average : Acreage: covered: Percent	: Average cost : per acre
		: Number	: Dollars	: Dollars	: Percent	: Dollars
Seed ^{1/}	: Lb.	: 4.5	: 0.07	: 0.32	: 100	: 0.32
Total materials	:	:	:	:	:	: .32

CONTRACT WORK HIRED

Combining	: Acre	: 1.0	: 2.90	: 2.90	: 32	: .93
Hauling	: Bu.	: 17.0	: .06	: 1.02	: 26	: .27
Total contract work	:	:	:	:	:	: 1.20

^{1/} About 96 percent of the seed is purchased.

Man labor, power, and machinery used by operation in producing and
harvesting grain sorghum, area III-D1, southwestern Kansas,
and the Panhandle of Oklahoma and Texas, 1948

Operation	: Size	: Times	:Time per acre:		:Average time per		
	: of	:over	:once over		:Acreage:	acre - all farms	
	:equipment:	:over	: Man	:Power	:covered:	: Man	: Tractor
		<u>No.</u>	<u>Hrs.</u>	<u>Hrs.</u>	<u>Pct.</u>	<u>Hrs.</u>	<u>Hrs.</u>
Chisel	:13-foot	1.7	0.23	0.22	72	0.28	0.27
One-way	:11-foot	1.6	.25	.24	55	.22	.21
Blank list	: 2-row	1.3	.36	.34	12	.06	.05
Blank list	: 3-row	1.1	.26	.25	25	.07	.07
Blank list	: 4-row	1.3	.20	.18	41	.11	.09
Harrow, spiketooth	:18-foot	1.3	.16	.15	56	.12	.11
List and plant	: 2-row	1.1	.44	.42	18	.09	.08
List and plant	: 3-row	1.1	.29	.27	21	.07	.06
List and plant	: 4-row	1.1	.23	.22	52	.13	.12
Seed, drill	:12-foot	1.0	.21	.20	9	.02	.02
Cultivate	: 2-row	1.9	.41	.39	12	.09	.09
Cultivate	: 3-row	1.3	.27	.26	8	.03	.03
Cultivate	: 4-row	2.2	.19	.18	30	.13	.12
Total preharvest	:					1.42	1.32
Combine	: 6-foot	1.0	.57	.54	20	.11	.11
Combine	:12-foot	1.0	.64	.30	48	.31	.14
Combine, contract	:12-foot	1.0	.70	.34	32	.22	.11
Haul grain, truck	:1½-ton	1.0	.25	.20	74	.18	---
Haul grain, c.	:1½-ton	1.0	.26	.26	26	.07	---
Total harvest	:					.89	.36
Total 1/	:					2.31	1.68

1/ In addition, truck use averaged 0.22 hour an acre.

GRAIN SORGHUM: RESOURCES USED IN PRODUCTION, AREA V-A1, 1949

The data presented here are based on a survey of approximately 46 farms in 1950 producing grain sorghum in western Iowa, eastern Nebraska, southeastern South Dakota, and northeastern Kansas. These farms are in type-of-farming area V-A1, a cattle feeding and hog area in the Missouri River Valley.

The farms surveyed averaged 398 total acres. In 1949, 247 acres were in crops, including 38 acres in grain sorghum. The average yield of grain sorghum was approximately 22 bushels per acre.

Tractors provide most of the power on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 10 to 27; the most common was about 19.

Materials used and contract work hired, 1949

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Average Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Seed ^{1/}	Lb.	12.0	0.06	0.72	100	0.72
Ceresan	Acre	1.0	.03	.03	58	.02
Mixed fertilizer	Cwt.	.95	3.10	2.94	22	.65
Spray (2,4-D)	Pt.	1.0	.95	.95	21	.20
Twine	Lb.	2.7	.27	.73	14	.10
Total materials						1.69

CONTRACT WORK HIRED

Cultivating	Acre	1.0	1.90	1.90	17	.32
Spraying	Acre	1.0	2.50	2.50	4	.10
Combining	Acre	1.0	4.30	4.30	14	.60
Total contract work						1.02

^{1/} Approximately 66 percent of the farmers in this area purchased grain sorghum seed.

Man labor, power, and machinery used by operation in producing and harvesting grain sorghum, area V-A1, western Iowa, eastern Nebraska, southeastern South Dakota, and northeastern Kansas, 1949

Operation	: Size	: : Time per acre	:Average time per				
	: of	:Times: once over	:Acreage:acre - all farms				
	:equipment:over	: Man : Power	:covered: Man : Tractor				
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Plow, moldboard	:2-14 inch	1.0	1.21	1.16	49	0.59	0.57
Disk, tandem	:10-foot	1.6	.37	.35	61	.36	.34
Disk, single	:12-foot	2.6	.34	.33	37	.33	.32
Harrow, spiketooth	:15-foot	1.7	.24	.22	23	.09	.09
Plant, lister	: 2-row	1.0	.50	.46	91	.46	.42
Plant, horses	: 2-row	1.0	.85	.78	6	.05	---
Drill	: 8-foot	1.0	.38	.36	3	.01	.01
Cultipack	:15-foot	1.0	.17	.16	15	.03	.02
Cultivate	: 2-row	3.2	.48	.46	80	1.23	1.18
Cultivate, contract	: 2-row	2.5	.48	.46	17	.20	.20
Spray	:21-foot	1.0	.20	.18	17	.03	.03
Spray, contract	:21-foot	1.0	.20	.18	4	.01	.01
Total preharvest	:					3.39	3.19
Combine	: 5-foot	1.0	.89	.85	48	.43	.41
Combine, s.p.	:12-foot	1.0	.31	.28	17	.05	---
Combine	:12-foot	1.0	.75	.55	7	.05	.04
Combine, contract	: 5-foot	1.0	.89	.85	14	.12	.12
Haul grain, truck	: 1-ton	1.0	.20	.20	50	.10	---
Haul grain	: ---	1.0	.20	.20	50	.10	.10
Bind	: 1-row	1.0	1.72	1.38	14	.24	.19
Shock by hand	: ---	1.0	1.67	---	14	.23	---
Thresh and haul	: ---	1.0	4.62	.85	14	.65	.12
Total harvest	:					1.97	.98
Total 1/	:					5.36	4.17

1/ In addition, horse work averaged 0.05 hour an acre, self-propelled combine 0.05 hour an acre and truck use 0.10 hour an acre.

GRAIN SORGHUM: RESOURCES USED IN PRODUCTION, AREA V-G1, 1949

The data presented here are based on a survey of approximately 40 farms in 1950, in western Missouri and eastern Kansas. These farms are located in type-of-farming area V-G1, a livestock, cash-grain, and dairy area.

The farms surveyed averaged 195 total acres. In 1949, 107 acres were in crops, including 13 in grain sorghum. The average yield of grain sorghum was 18 bushels per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 11 to 25; the most common was 18.

Materials used and contract work hired, 1949

MATERIALS USED

Item	: Unit	: Quantity: per acre	: Price : per unit	: Cost : per acre	: Average :Acreage: covered:per acre	: cost per acre
		: Number	Dollars	Dollars	Percent	Dollars
Seed <u>1/</u>	: Lb.	: 6	0.06	0.36	100	0.36
Manure	: Ton	: 5.0	<u>2/</u> 2.00	10.00	14	1.40
Mixed fertilizer	: Cwt.	: .80	1.95	1.56	19	.30
Spray (2,4-D)	: Gal.	: .2	3.10	.62	4	.02
Twine	: Lb.	: 3.0	.25	.75	32	.24
Total materials						<u>2.32</u>

CONTRACT WORK HIRED

Combining	: Acre	: 1.0	4.15	4.15	6	.25
Threshing	: Bu.	: 18	.10	1.80	18	.32
Total contract work						<u>.57</u>

1/ Approximately 46 percent of the farmers in this area purchased seed for grain sorghum.

2/ Estimated.

Man labor, power, and machinery used by operation in producing and harvesting grain sorghum, area V-G1, western Missouri and eastern Kansas, 1949

Operation	: Size	: Time per acre:	: Average time per
	: of	: Times: once over	: Acreage: acre - all farms
	: equipment: over	: Man : Power : covered:	: Man: Tractor: Horse
	: No.	: Hrs. Hrs. Pct.	: Hrs. Hrs. Hrs.
Apply manure, spreader:	60-bu.	1.0 3.01 1.00 14	0.42 0.14 ---
Plow, moldboard	:2-14 inch	1.0 1.26 1.21 71	.89 .86 ---
Plow, moldboard, h.	:2-12 inch	1.0 2.35 9.40 16	.38 --- 1.50
Disk, tandem	: 7-foot	1.5 .58 .55 50	.44 .41 ---
Disk, single	:10-foot	2.0 .54 .52 21	.23 .22 ---
Disk, single, horses	: 8-foot	2.0 .62 2.09 15	.19 --- .63
Harrow, spiketooth	:14-foot	1.1 .31 .29 50	.17 .16 ---
Harrow, spiketooth, h.:	10-foot	1.2 .66 1.90 12	.10 --- .27
Plant	: 2-row	1.0 .71 .68 55	.39 .37 ---
Plant, horses	: 2-row	1.0 1.14 2.18 34	.39 --- .74
List and plant, horses:	1-row	1.0 1.85 4.88 11	.20 --- .54
Replant	: 2-row	1.0 .67 .64 2	.01 .01 ---
Harrow, spiketooth	:14-foot	1.0 .42 .38 11	.05 .04 ---
Harrow, spiketooth, h.:	9-foot	1.0 .68 1.31 6	.04 --- .08
Cultivate, first	: 2-row	1.0 .80 .77 70	.56 .54 ---
Cultivate, first, h.	: 1-row	1.0 1.86 3.55 29	.54 --- 1.03
Cultivate, other	: 2-row	1.5 .63 .60 66	.62 .59 ---
Cultivate, other, h.	: 1-row	1.7 1.60 3.04 32	.87 --- 1.65
Hoe by hand	: ---	1.0 2.78 --- 4	.11 --- ---
Spray	: 5-row	1.0 .47 .42 4	.02 .02 ---
Total preharvest	:	:	6.62 3.36 6.44
Combine	: 5-foot	1.0 1.50 1.02 44	.66 .45 ---
Combine, contract	: 5-foot	1.0 1.50 1.02 6	.09 .06 ---
Haul from combine, t.	:1½-ton	1.0 1.00 1.00 50	.50 --- ---
Bind	: 1-row	1.0 1.44 1.38 16	.23 .22 ---
Bind, horses	: 1-row	1.0 1.60 4.21 15	.24 --- .63
Cut by hand	: ---	1.0 9.58 --- 1	.10 --- ---
Shock by hand	: ---	1.0 2.00 --- 32	.64 --- ---
Thresh	:26-inch	1.0 3.10 .84 14	.43 .12 ---
Thresh, contract	:26-inch	1.0 .85 .82 18	.15 .15 ---
Haul grain, truck	:1½-ton	1.0 .85 .82 32	.27 --- ---
Top and haul, horses	: ---	1.0 9.81 16.42 18	1.77 --- 2.96
Total harvest	:	:	5.08 1.00 3.59
Total 1/	:	:	11.70 4.36 10.03

1/ In addition, truck use averaged 0.76 hour an acre.

GRAIN SORGHUM: RESOURCES USED IN PRODUCTION, AREA VI-E1, 1949

The data presented here are based on a survey in 1950 of 30 farms producing grain sorghum in central Texas. These farms are located in type-of-farming area VI-E1, a livestock and cash grain area in the Grand Prairie of Texas.

The farms surveyed averaged 467 acres per farm. In 1949, 129 acres were in crops including 28 acres in grain sorghum. The average yield of grain sorghum was 13 hundredweight per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The drawbar-horsepower rating of these tractors ranged from 10 to 26; the most common was about 16.

Materials used and contract work hired, 1949

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit	Cost per acre	Average Acreage covered	Average cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Seed ^{1/}	Lb.	8	0.06	0.48	100	0.48
Sacks	No.	10.3	.15	1.54	24	.37
Total materials						.85

CONTRACT WORK HIRED

Combining	Acre	1.0	3.00	3.00	38	1.14
Hauling	Cwt.	13.0	.11	1.43	20	.29
Total contract work						1.43

^{1/} Approximately 84 percent of the farmers in this area purchased grain sorghum seed.

Man labor, power, and machinery used by operation in producing and harvesting grain sorghum, area VI-El, central Texas, 1949

Operation	Size	Time per acre:			Average time per		
	of	Times:	once over		Acreage: acre - all farms		
	equipment:	over	Man	Power	covered:	Man	Tractor
	No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.	
Plow, disk	: 3-disk	1.2	1.10	1.05	63	0.83	0.79
Plow, one-way	: 6-foot	1.1	.62	.59	25	.17	.16
List	: 2-row	1.4	.64	.61	69	.62	.59
List	: 3-row	1.3	.33	.32	17	.07	.07
Disk, tandem	: 7-foot	1.0	.46	.40	56	.26	.25
Harrow, spiketooth	: 12-foot	1.0	.32	.30	6	.02	.02
Plant	: 2-row	1.0	.68	.62	82	.56	.51
Plant	: 4-row	1.0	.34	.32	18	.06	.06
Cultivate	: 2-row	2.0	.87	.69	74	1.29	1.02
Cultivate	: 4-row	2.0	.30	.28	17	.10	.10
Hoe by hand	: ---	1.0	2.97	---	24	.71	---
Total preharvest	:					4.69	3.57
Combine	: 6-foot	1.0	1.14	.58	62	.71	.36
Combine, contract	: 6-foot	1.0	1.21	.74	38	.46	.28
Haul, truck	: ---	1.0	.42	.24	80	.34	---
Haul, truck, contract:	: ---	1.0	.24	.24	20	.05	---
Total harvest	:					1.56	.64
Total <u>1/</u>	:					6.25	4.21

1/ In addition, truck use averaged 0.24 hour an acre.

GRAIN SORGHUM: RESOURCES USED IN PRODUCTION, AREA VI-E2, 1949

The data presented here are based on a survey in 1950 of 48 farms that produced grain sorghum. These farms are located in type-of-farming area VI-E2, a general farming area in southeastern Kansas and north-eastern Oklahoma.

The farms surveyed averaged 208 total acres. In 1949, 109 acres were in crops, including 15 acres in grain sorghum. The yield of grain sorghum averaged about 15 bushels per acre.

Tractors provided most of the power used on these farms although horsedrawn planters were used for 25 percent of the total acreage planted. The drawbar-horsepower rating of these tractors ranged from 11 to 26; the most common was about 17.

Materials used and contract work hired, 1949

MATERIALS USED

Item	: Unit	: Quantity : : per : : acre	Price : : per : : unit	Cost : : per : : acre	: Average : Acreage : : covered :	: cost : per acre
		: Number	Dollars	Dollars	Percent	Dollars
Seed	: Bu.	: 0.14	4.25	0.60	100	0.60
Fertilizer(4-12-4)	: Cwt.	: 1.10	2.05	2.26	8	.18
Total materials	:	:				<u>78</u>

CONTRACT WORK HIRED

Combining	: Acre	: 1.0	3.45	3.45	20	<u>.69</u>
Total contract work	:	:				<u>.69</u>
	:	:				

Man labor, power, and machinery used by operation in producing and
harvesting grain sorghum, area VI-E2, southeastern Kansas
and northeastern Oklahoma, 1949

Operation	: Size	:	:Time per acre:			:Average time per	
	: of	:Times:	once over		:Acreage:	acre - all farms	
	:equipment:	over	Man	Power	covered:	Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Plow, moldboard	:2-14 inch	1.0	1.30	1.24	100	1.30	1.24
Disk, tandem	: 7-foot	1.5	.52	.50	61	.48	.46
Disk, single	: 8-foot	2.4	.45	.43	34	.37	.35
Harrow, spiketooth	:12-foot	1.4	.35	.32	68	.33	.30
Disk and harrow	: 7-foot	1.5	.34	.33	3	.02	.01
Plant	: 2-row	1.0	.55	.53	75	.41	.40
Plant, horses	: 2-row	1.0	.86	1.65	25	.22	---
Cultivate	: 2-row	2.0	.59	.56	84	.99	.94
Cultivate, horses	: 1-row	2.4	1.22	2.33	5	.15	---
Total preharvest	:					4.27	3.70
Combine	: 6-foot	1.0	.82	.73	60	.49	.44
Combine, contract	: 6-foot	1.0	.82	.73	20	.16	.15
Haul from combine, t.	:1½-ton	1.0	.66	.63	80	.53	---
Top and haul, horses	: ---	1.0	5.59	6.97	20	1.12	---
Total harvest	:					2.30	.59
Total 1/	:					6.57	4.29

1/ In addition, horse work averaged 1.92 hours an acre and truck use 0.50 hour an acre.

GRAIN SORGHUM: RESOURCES USED IN PRODUCTION, AREA VII-A2, 1949

Data presented here are based on a survey in 1950 of 30 farms that produced grain sorghum in east central Texas. These farms are located in type-of-farming area VII-A2, a specialized cotton area in the Black Waxy Prairie.

The farms surveyed averaged 224 acres. In 1949, 154 acres were in crops, including 22 acres in grain sorghum. The yield of grain sorghum averaged about 14 hundredweight per acre.

Tractors and motorized equipment provided all of the power used in producing grain sorghum. The drawbar-horsepower rating of tractors ranged from 10 to 26; the most common was about 15.

Materials used and contract work hired, 1949

MATERIALS USED

Item	: Unit	: Quantity: per acre	: Price : per unit	: Cost : per acre	: Average : Acreage: covered	: cost per acre
		: Number	Dollars	Dollars	Percent	Dollars
Seed	: Lb.	: 12	0.07	0.84	100	0.84
Mixed fertilizer	: Cwt.	: 1.40	2.60	3.64	16	.58
Phosphate fertilizer	: Cwt.	: .75	1.50	1.12	3	.03
Sacks	: No.	: 5	.15	.75	8	.06
Total materials	:	:				1.51

CONTRACT WORK HIRED

Combining	: Acre	: 1.0	3.80	3.80	90	3.42
Hauling	: Cwt.	: 14.0	.12	1.68	50	.84
Total contract work	:	:				4.26

Man labor, power, and machinery used by operation in producing and
harvesting grain sorghum, area VII-A2, east central
Texas, 1949

Operation	: Size :	:Time per acre:			:Average time per		
	: of :	:Times:	once over	:Acreage:	acre - all farms		
	:equipment:	over :	Man :	Power:	covered:	Man :	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Plow, moldboard	:2-14 inch	1.0	1.11	1.06	48	0.53	0.51
Plow, one-way	: 5-foot	1.6	.99	.94	36	.57	.54
Plow, disk	: 2-disk	1.0	1.51	1.44	5	.08	.07
Disk, tandem	: 6-foot	1.1	.51	.44	20	.11	.10
Harrow, spiketooth	:12-foot	1.1	.29	.27	37	.12	.11
List	: 2-row	1.3	.64	.61	39	.32	.31
Lay-off rows	: 2-row	1.0	.70	.67	20	.14	.13
Plant	: 2-row	1.0	.70	.58	86	.60	.50
Seed, drill	: 9-foot	1.0	.39	.36	14	.05	.05
Harrow, spiketooth	:12-foot	1.5	.43	.41	5	.03	.03
Cultivate	: 2-row	2.4	.58	.56	95	1.32	1.27
Total preharvest	:					3.87	3.62
Combine	: 5-foot	1.0	1.32	.80	10	.13	.08
Combine, contract	: 5-foot	1.0	1.20	.58	90	1.08	.52
Haul to barn	: ---	1.0	.52	.33	39	.20	.13
Haul to market, truck	:1½-ton	1.0	.32	.29	11	.04	---
Haul, truck, contract	:1-ton	1.0	.29	.29	50	.14	---
Total harvest	:					1.59	.73
Total 1/	:					5.46	4.35

1/ In addition, truck use averaged 0.17 hour an acre.

GRAIN SORGHUM: RESOURCES USED IN PRODUCTION, AREA VII-G2, 1949

The data presented here are based on a survey in 1950 of 23 farms producing grain sorghum in central Oklahoma. These farms are located in type-of-farming area VII-G2, a cotton and wheat producing area in the Mixed Prairies and Cross Timbers section of Oklahoma.

The farms surveyed averaged 293 acres per farm. In 1949, 119 acres were in crops, including 25 acres in grain sorghum. The average yield of grain sorghum was about 14 bushels per acre.

Tractors provided most of the power used on these farms, although horses were used for some operations. The drawbar-horsepower rating of tractors on these farms ranged from 10 to 26; the most common was about 17.

Materials used and contract work hired, 1949

MATERIALS USED

Item	: Unit	: Quantity: per acre	: Price : per unit	: Cost : per acre	: Average : Acreage: covered	: cost : per acre
		: Number	Dollars	Dollars	Percent	Dollars
Seed ^{1/}	: Lb.	: 7	0.07	0.49	100	0.49
Mixed fertilizer	: Cwt.	: 1.00	2.15	2.15	13	.28
Twine	: Lb.	: 2.8	.22	.62	20	.12
Total materials	:	:				.89

CONTRACT WORK HIRED

Combining	: Acre	: 1.0	3.85	3.85	29	1.12
Binding	: Acre	: 1.0	3.00	3.00	4	.12
Total contract work	:	:				1.24

^{1/} Approximately 66 percent of the farmers in this area purchased grain sorghum seed.

Man labor, power, and machinery used by operation in producing and harvesting grain sorghum, area VII-G2, central Oklahoma, 1949

Operation	: Size	:	:Time per acre:			: Average time per		
	: of	:	:Times:	once over	:Acreage:	acre - all farms		
	:equipment:	over	: Man	:Power	: covered:	Man	:Tractor:	Horse
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.	Hrs.
Plow, moldboard	:2-14 inch	1.0	1.20	1.14	71	0.85	0.81	---
Plow, disk	: 3-disk	1.0	1.22	1.17	11	.13	.13	---
Disk, tandem	: 7-foot	1.3	.56	.54	78	.57	.55	---
Harrow, spiketooth	: 8-foot	1.3	.34	.30	37	.16	.14	---
Harrow, spiketooth, h.	: 7-foot	2.0	.29	1.05	4	.02	---	0.08
Harrow, springtooth	: 9-foot	1.5	.54	.49	4	.03	.03	---
List	: 2-row	1.0	.77	.74	16	.12	.12	---
List, horses	: 1-row	1.0	1.38	3.94	12	.17	---	.47
Plant	: 2-row	1.0	.69	.63	74	.51	.47	---
Plant, horses	: 1-row	1.0	1.32	2.42	14	.18	---	.34
Seed, drill	:10-foot	1.0	.45	.41	12	.05	.05	---
Harrow, spiketooth	: 8-foot	1.0	.37	.34	9	.03	.03	---
Cultivate	: 2-row	2.8	.72	.68	76	1.54	1.44	---
Cultivate, horses	: 1-row	2.7	1.83	3.34	14	.69	---	1.26
Total preharvest	:					5.05	3.77	2.15
Combine	: 6-foot	1.0	1.51	.62	33	.50	.20	---
Combine, contract	: 6-foot	1.0	1.00	.73	29	.29	.21	---
Head, by hand	: ---	1.0	6.02	---	18	1.08	---	---
Bind	: 2-row	1.0	1.74	.88	16	.28	.14	---
Bind, contract	: 2-row	1.0	.97	.88	4	.04	.04	---
Haul to barn	: ---	1.0	.47	.26	19	.09	.05	---
Haul to barn, horses	: ---	1.0	.56	.87	48	.27	---	.42
Haul to town, truck	: ---	1.0	.18	.14	33	.06	---	---
Total harvest	:					2.61	.64	.42
Total <u>1/</u>	:					7.66	4.41	2.57

1/ In addition, truck use averaged 0.05 hour an acre.

HAIRY VETCH SEED: RESOURCES USED IN PRODUCTION, AREA VI-E1, 1949

The data presented here are based on a survey in 1950 of 15 farms in Cooke County, Texas, that produce hairy vetch for seed. These farms are located in type-of-farming area VI-E1, a livestock and cash grain area in the Grand Prairie of Texas.

The farms surveyed averaged 305 acres per farm. Cropland comprised 121 acres. In 1949, an average of 20 acres per farm was used for hairy vetch seed production with rye for a support crop. The average yield of hairy vetch seed was 79 pounds per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The drawbar-horsepower rating of these tractors ranged from 14 to 23; the most common was about 17.

Materials used and contract work hired, 1949

MATERIALS USED

Item	: Unit	: Quantity per acre	: Price per unit	: Cost per acre	: Average Acreage covered	: Average cost per acre
		: Number	: Dollars	: Dollars	: Percent	: Dollars
Seed <u>1/</u>	: Lb.	: 18	0.20	3.60	100	3.60
Mixed fertilizer	: Cwt.	: 1.95	2.00	3.90	13	.51
Phosphate fertilizer (20%)	: Cwt.	: 2.20	1.55	3.41	78	2.66
Phosphate fertilizer (45%)	: Cwt.	: 1.00	3.25	3.25	7	.23
Phosphate fertilizer (60%)	: Cwt.	: 2.00	4.10	8.20	8	.66
Used sacks	: No.	: 1.0	.11	.11	16	.02
Total materials						<u>7.68</u>

CONTRACT WORK HIRED

Combining	: Acre	: 1.0	4.75	4.75	66	3.14
Total contract work						<u>3.14</u>

1/ Approximately 75 percent of the farmers in this area purchased hairy vetch seed.

Man labor, power, and machinery used by operation in producing and harvesting hairy vetch seed, area VI-E1, central Texas, 1949

Operation	Size	Time per acre:			Average time per		
	of	Times:	once over		Acreage:	acre - all farms	
	equipment:	over	Man	Power	covered:	Man	Tractor
	No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.	
Cut stalks	: 2-row	1.0	0.42	0.41	6	0.03	0.02
Plow, moldboard	: 2-14 inch	1.0	1.20	1.15	10	.12	.12
Plow, disk	: 3-disk	1.2	1.16	1.10	56	.78	.74
Plow, one-way	: 6-foot	1.2	.62	.59	21	.16	.15
Disk, tandem	: 7-foot	1.5	.37	.36	10	.06	.05
Harrow, spiketooth	: 12-foot	1.4	.21	.20	33	.10	.10
Fertilize, drill	: 8-foot	1.0	.37	.28	27	.10	.08
Seed, drill	: 8-foot	1.0	.49	.41	100	.49	.41
Harrow, spiketooth	: 10-foot	1.0	.20	.19	20	.04	.04
Total preharvest	:					1.88	1.71
Combine	: 6-foot	1.0	.76	.63	34	.26	.21
Combine, contract	: 6-foot	1.0	.73	.60	66	.48	.40
Clean and separate	: ---	1.0	.19	.14	85	.16	.12
Haul seed	: ---	1.0	.09	.06	25	.02	.02
Haul seed, truck	: 1/2-ton	1.0	.07	.06	75	.05	---
Total harvest	:					.97	.75
Total 1/	:					2.85	2.46

1/ In addition, truck use averaged 0.04 hour an acre.

HAIRY VETCH SEED: RESOURCES USED IN PRODUCTION, AREA VII-A2, 1949

Data presented here are based on a survey in 1950 of 15 farms that produced hairy vetch for seed. These farms are located in type-of-farming area VII-A2, a specialized cotton area in the Black Waxy Prairie.

The farms surveyed averaged 471 acres. Cropland comprised 252 acres. In 1949, an average of 29 acres was used for the production of hairy vetch seed with rye for a support crop. The average yield of hairy vetch seed was about 135 pounds per acre.

Tractors provided all of the power used in producing hairy vetch seed. The drawbar-horsepower rating of these tractors ranged from 10 to 31; the most common was about 18.

Materials used and contract work hired, 1949

MATERIALS USED

Item	: Unit	: Quantity per acre	: Price per unit	: Cost per acre	: Average Acreage covered	: Average cost per acre
		: Number	Dollars	Dollars	Percent	Dollars
Seed ^{1/}	: Lb.	: 16	0.20	3.20	100	3.20
Inoculant	: Acre	: 1.0	.20	.20	17	.03
Superphosphate	: Cwt.	: 2.35	1.55	3.64	99	3.60
Sacks	: No.	: 2	.25	.50	22	.11
Total materials	:	:				6.94

CONTRACT WORK HIRED

Combining	: Acre	: 1.0	4.30	4.30	35	1.51
Cleaning and separating	: Cwt.	: 1.35	.40	.54	55	.30
Hauling	: Cwt.	: 1.35	.15	.20	9	.02
Total contract work	:	:				1.83

^{1/} Approximately 28 percent of the farmers in this area purchased hairy vetch seed.

Man labor, power, and machinery used by operation in producing and
harvesting hairy vetch seed, area VII-A2, east central
Texas, 1949

Operation	: Size : of : equipment:	: Times: : over :	:Time per acre:			:Average time per	
			: once over		:Acreage:	:acre - all farms	
			Man	Power	covered:	Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Plow, disk	: 3-disk	1.4	1.16	1.10	84	1.36	1.29
Plow, one-way	: 5-foot	1.2	.88	.84	49	.52	.49
Disk, tandem	: 8-foot	1.0	.61	.58	29	.18	.17
Harrow, spiketooth	:12-foot	1.0	.29	.27	58	.17	.16
Harrow, springtooth	: 9-foot	1.5	.46	.42	13	.09	.09
Seed, drill	:10-foot	1.0	.52	.47	100	.52	.47
Total preharvest	:					2.84	2.67
Combine	: 5-foot	1.0	1.63	.75	65	1.06	.49
Combine, contract	: 5-foot	1.0	1.54	.88	35	.54	.31
Clean and separate	: ---	1.0	.19	.14	30	.06	.04
Clean and separate, contract:	: ---	1.0	.19	.14	55	.10	.08
Haul from combine, truck	: 1-ton	1.0	.19	.12	91	.17	---
Haul to market, t. contract	: 1-ton	1.0	.12	.12	9	.01	---
Total harvest	:					1.94	.92
Total <u>1/</u>	:					4.78	3.59

1/ In addition, truck use averaged 0.12 hour an acre.

HUBAM CLOVER SEED: RESOURCES USED IN PRODUCTION, AREA VI-E1, 1949

The data presented here are based on a survey in 1950 of 15 farms in Cooke County, Texas, that produce Hubam clover for seed. These farms are located in type-of-farming area VI-E1, a livestock and cash grain area in the Grand Prairie of Texas.

The farms surveyed averaged 281 acres per farm. Cropland comprised 169 acres. In 1949, approximately 12 acres were in Hubam clover seed and the yield averaged 179 pounds per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The drawbar-horsepower rating of these tractors ranged from 13 to 23; the most common was about 19.

Materials used and contract work hired, 1949

MATERIALS USED

Item	Unit	Quantity per acre	Price per unit Dollars	Cost per acre Dollars	Average Acreage covered Percent	Average cost per acre Dollars
Seed 1/	Lb.	19	0.25	4.75	100	4.75
Mixed fertilizer	Cwt.	1.00	2.50	2.50	2	.05
Phosphate fertilizer (20%)	Cwt.	2.20	1.70	3.74	74	2.77
Phosphate fertilizer (60%)	Cwt.	1.00	3.70	3.70	14	.52
Sacks	No.	5	.16	.80	15	.12
Total materials						8.21

CONTRACT WORK HIRED

Combining	Acre	1.0	3.90	3.90	23	.90
Cleaning	Cwt.	1.79	.35	.63	15	.09
Total contract work						.99

1/ Approximately 40 percent of the farmers in this area purchased Hubam clover seed.

Man labor, power, and machinery used by operation in producing and harvesting Hubam clover seed, area VI-EI, central Texas, 1949

Operation	Size	Time per acre:			Average time per		
	of	Times:	once over		Acreage:acre - all farms		
	equipment:	over	Man	Power	covered:	Man	Tractor
	No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.	
Fall operations:							
Plow, disk	3-disk	1.0	1.19	1.13	60	0.71	0.68
Plow, one-way	5-foot	1.8	.76	.72	42	.58	.55
Spring operations:							
Plow, one-way	6-foot	1.2	.68	.65	54	.44	.42
Harrow, spiketooth	12-foot	1.3	.23	.22	49	.15	.14
Harrow, springtooth	9-foot	1.0	.38	.35	11	.04	.04
Fertilize, drill	12-foot	1.0	.27	.24	7	.02	.02
Seed, drill	9-foot	1.0	.28	.26	100	.28	.26
Total preharvest						2.22	2.11
Windrow	7-foot	1.0	.58	.56	53	.31	.30
Combine	6-foot	1.0	1.22	.86	77	.94	.66
Combine, contract	6-foot	1.0	.88	.67	23	.20	.15
Haul, truck <u>1</u> /	---	1.0	.15	.13	100	.15	---
Clean	---	1.0	.28	.26	63	.18	.16
Clean, contract	---	1.0	.28	.26	15	.04	.04
Total harvest						1.82	1.31
Total <u>2</u> /						4.04	3.42

1/ This includes hauling to and from the cleaner.

2/ In addition, truck use averaged 0.13 hour an acre.

HUBAM CLOVER SEED: RESOURCES USED IN PRODUCTION, AREA VII-A2, 1949

Data presented here are based on a survey in 1950 of 22 farms producing Hubam clover for seed in east central Texas. These farms are located in type-of-farming area VII-A2, a specialized cotton area in the Black Waxy Prairie.

The farms surveyed averaged 306 acres. In 1949, 214 acres were in crops, including 21 acres that were used for the production of Hubam clover seed. The yield of Hubam clover seed was 183 pounds per acre.

Tractors and motorized equipment provided all of the power used in producing Hubam clover seed. The drawbar-horsepower rating of tractors ranged from 13 to 26; the most common was about 20.

Materials used and contract work hired, 1949

MATERIALS USED

Item	: Unit	: Quantity per acre	: Price per unit	: Cost per acre	: Average Acreage covered	: Average cost per acre
		: Number	: Dollars	: Dollars	: Percent	: Dollars
Seed ^{1/}	: Lb.	: 17	0.20	3.40	100	3.40
Inoculant	: Acre	: 1.0	.13	.13	27	.04
Superphosphate fertilizer:	: Cwt.	: 2.75	1.50	4.12	74	3.05
Sacks	: No.	: 2	.24	.48	41	.20
Total materials	:	:				6.69

CONTRACT WORK HIRED

Windrowing	: Acre	: 1.0	1.75	1.75	13	.23
Combining	: Acre	: 1.0	4.15	4.15	28	1.16
Hauling	: Cwt.	: 1.83	.13	.24	16	.04
Total contract work	:	:				1.43

^{1/} Approximately 39 percent of the farmers in this area purchased Hubam clover seed.

Man labor, power, and machinery used by operation in producing and
harvesting Hubam clover seed, area VII-A2, east central
Texas, 1949

Operation	: Size : of : equipment:	: Times: : over :	:Time per acre:			:Average time per	
			once over	Man	Power	Acres: covered:	Man : Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Plow, disk	: 3-disk	1.0	1.14	1.09	48	0.55	0.52
Plow, one-way	: 5-foot	1.4	.92	.88	47	.61	.58
Disk, tandem	: 8-foot	1.0	.45	.43	40	.18	.17
Harrow, spiketooth	: 12-foot	1.0	.18	.17	48	.09	.08
Harrow, springtooth	: 9-foot	1.0	.51	.46	18	.09	.08
Fertilize, spreader	: 10-foot	1.0	.39	.33	18	.07	.06
Seed, drill	: 10-foot	1.0	.46	.38	100	.46	.38
Total preharvest	:					2.05	1.87
Windrow	: 8-foot	1.0	.60	.44	79	.47	.35
Windrow, contract	: 8-foot	1.0	.78	.49	13	.10	.06
Combine	: 6-foot	1.0	1.44	.62	72	1.04	.45
Combine, contract	: 6-foot	1.0	.92	.56	28	.26	.16
Clean	: ---	1.0	.28	.26	67	.19	.17
Haul from combine	: ---	1.0	.15	.14	21	.03	.03
Haul from combine, truck	: ---	1.0	.15	.11	63	.09	---
Haul to town, t., contract:	: ---	1.0	.13	.13	16	.02	---
Total harvest	:					2.20	1.22
Total 1/	:					4.25	3.09

1/ In addition, truck use averaged 0.09 hour an acre.

MADRID CLOVER SEED: RESOURCES USED IN PRODUCTION, AREA VII-A2, 1949

Data presented here are based on a survey in 1950 of 14 farms producing Madrid clover for seed. These farms are located in type-of-farming area VII-A2, a specialized cotton area in the Black Waxy Prairie.

The farms surveyed averaged 624 acres. In 1949, 343 acres were in crops, including 18 acres used for the production of Madrid clover seed. The yield of Madrid clover seed averaged about 179 pounds per acre.

Tractors provided all of the power used. The drawbar-horsepower rating of tractors ranged from 14 to 28; the most common was about 19.

Materials used and contract work hired, 1949

MATERIALS USED

Item	: Unit	: Quantity : per	: Price : per	: Cost : per	: Average : Acreage : cost
		: acre	: unit	: acre	: covered : per acre
		: Number	Dollars	Dollars	Percent Dollars
Seed <u>1/</u>	: Lb.	: 15	0.40	6.00	100 6.00
Superphosphate	: Cwt.	: 1.80	1.20	2.16	38 .82
Sacks	: No.	: 2	.21	.42	34 .14
Total materials					6.96

CONTRACT WORK HIRED

Combining	: Acre	: 1.0	4.10	4.10	41 1.68
Total contract work					1.68

1/ Approximately 70 percent of the farmers in this area purchased Madrid clover seed.

Man labor, power, and machinery used by operation in producing and
harvesting Madrid clover seed, area VII-A2, east central
Texas, 1949

Operation	: Size :	:Time per acre:			:Average time per		
	: of :	:Times:	: once over :		:Acreage:acre - all farms		
	:equipment:	:over :	Man	Power	:covered:	Man	: Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Plow, disk	: 3-disk	1.0	1.47	1.41	44	0.65	0.62
Plow, moldboard	:2-14 inch	1.0	1.38	1.31	8	.11	.10
Plow, one-way	: 7-foot	1.8	.83	.79	63	.94	.89
Disk, tandem	: 7-foot	1.0	.53	.50	9	.05	.04
Harrow, spiketooth	:16-foot	1.7	.21	.19	42	.15	.13
Harrow, springtooth	: 9-foot	1.0	.58	.53	5	.03	.03
Seed, drill	: 9-foot	1.0	.43	.37	100	.43	.37
Total preharvest	:					2.36	2.18
Windrow	: 7-foot	1.0	.48	.40	77	.37	.31
Combine	: 6-foot	1.0	.84	.55	59	.50	.32
Combine, contract	: 6-foot	1.0	1.15	.53	41	.47	.22
Clean	: ---	1.0	.28	.26	67	.19	.17
Haul from combine	: ---	1.0	.14	.11	58	.08	.06
Haul from combine, t.	: 1-ton	1.0	.09	.08	42	.04	---
Total harvest	:					1.65	1.08
Total 1/	:					4.01	3.26

1/ In addition, truck use averaged 0.03 hour an acre.

OATS (IRRIGATED): RESOURCES USED IN PRODUCTION, AREA IX-F2, 1951

The data presented here are based on a survey made in 1951 of approximately 50 farms producing oats under irrigation in 1951 in southeastern Wyoming and west central Nebraska. These farms are located in type-of-farming area IX-F2, a specialized crop and general farming area along the North Platte and Laramie Rivers. The particular farms surveyed are diversified, producing livestock, hay, corn, small grains, and specialized crops.

The farms averaged about 200 acres per farm. Cropland comprised about 153 acres. In 1951, approximately 18 acres were in oats, and the yield was about 44 bushels per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of the tractors ranged from 14 to 27. There were two common sizes: 16 and 26.

Materials used and contract work hired, 1951

MATERIALS USED

Item	: Unit	: Quantity per acre	: Price per unit	: Cost per acre	: Average Acreage covered	: Average cost per acre
		: Number	: Dollars	: Dollars	: Percent	: Dollars
Seed	: Cwt.	: 0.90	3.75	3.38	100	3.38
Seed-treating	: Cwt.	: .90	.25	.22	75	.16
Manure	: Ton	: 7	1/2.00	14.00	5	.70
Spray (2,4-D)	: Pt.	: 1.0	.50	.50	10	.05
Water	: Acre	: 1.0	1.60	1.60	100	1.60
Twine	: Lb.	: 3.8	.35	1.33	53	.70
Total materials						6.59

CONTRACT WORK HIRED

Combining	: Acre	: 1.0	5.00	5.00	26	1.30
Threshing	: Bu.	: 44	.13	5.72	42	2.40
Total contract work						3.79

1/ Estimated.

Man labor, power, and machinery used by operation in producing and
harvesting oats, irrigated, area IX-F2, southeastern Wyoming
and west central Nebraska, 1951

Operation	: Size :	:Time per acre:			:Average time per		
	: of :	:Times:	:once over		:Acreage:	:acre - all farms	
	:equipment:	:over :	Man	Power	covered:	Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Apply manure, sp.	:75-bu.	1.0	3.85	3.85	5	0.19	0.19
Plow, moldboard	:2-16 inch	1.0	1.26	1.21	29	.37	.35
Plow, moldboard	:2-14 inch	1.0	1.50	1.43	28	.42	.40
Disk, tandem	: 8-foot	1.6	.55	.50	67	.59	.54
Harrow, springtooth	: 9-foot	1.7	.55	.50	17	.16	.14
Harrow, spiketooth	:15-foot	2.3	.31	.28	83	.59	.53
Level	:10-foot	1.6	.47	.45	80	.60	.58
Seed, drill	:10-foot	1.0	.52	.47	100	.52	.47
Ditch	: ---	1.0	.37	.24	85	.31	.20
Ditch by hand	: ---	1.0	.47	---	15	.07	---
Irrigate	: ---	1.9	3.92	---	100	7.45	---
Spray	:24-foot	1.0	.57	.43	10	.06	.04
Total preharvest	:					11.43	3.44
Bind	: 8-foot	1.0	1.46	.72	53	.77	.38
Shock by hand	: ---	1.0	1.57	---	50	.78	---
Haul to thresher	: ---	1.0	3.55	2.12	53	1.88	1.12
Thresh	:22-inch	1.0	1.51	.52	11	.17	.06
Thresh, contract	:22-inch	1.0	1.51	.52	42	.63	.22
Combine	: 6-foot	1.0	1.45	1.33	21	.30	.28
Combine, contract	: 6-foot	1.0	1.45	1.33	26	.38	.35
Haul, truck	:1½-ton	1.0	1.10	1.05	80	.88	---
Total harvest	:					5.79	2.41
Total 1/	:					17.22	5.85

1/ In addition, truck use averaged 0.84 hour an acre.

OATS: RESOURCES USED IN PRODUCTION, AREA II-B⁴, 1950

The data presented here are based on a survey in 1950 of 29 farms that produced oats. These farms are located in type-of-farming area II-B⁴, in the Osage-Flint Hills of Kansas and Oklahoma. Stock raising is the most important enterprise in this area.

The farms surveyed averaged 544 total acres, of which 179 were in crops. In 1950, 36 acres were planted in oats and 28 acres were harvested. The yield of oats averaged about 31 bushels per harvested acre.

Tractors and motorized equipment provide all of the power used in producing oats. The drawbar-horsepower rating of these tractors ranged from 10 to 26; the most common was about 18.

Materials used and contract work hired, 1950

MATERIALS USED

Item	: Unit	: Quantity: per acre	: Price : per unit : Dollars	: Cost : per acre : Dollars	: Average : Acreage: covered: Percent	: cost : per acre : Dollars
Seed ^{1/}	: Bu.	: 2.0	1.35	2.70	100	2.70
Manure	: Ton	: 3	^{2/} 2.00	6.00	3	.18
Mixed fertilizer	: Cwt.	: .85	2.90	2.46	18	.44
Nitrate fertilizer	: Cwt.	: .65	3.55	2.31	19	.44
Phosphate fertilizer	: Cwt.	: .90	2.70	2.43	41	1.00
Total materials	:	:				4.76

CONTRACT WORK HIRED

Combining	: Acre	: 1.0	3.45	3.45	32	1.10
Hauling	: Bu.	: 31	.05	1.55	5	.08
Total contract work	:	:				1.18

^{1/} Approximately 68 percent of the farmers in this area purchased seed oats.

^{2/} Estimated.

Man labor, power, and machinery used by operation in producing and
harvesting oats, area II-B4, east central Kansas and
north central Oklahoma, 1950

Operation	: Size :	:Time per acre:			:Average time per		
	: of :	:Times:	:once over		:Acreage:	:acre - all farms	
	:equipment:	:over :	Man	Power	:covered:	Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Apply manure, spreader	: ---	1.0	3.01	1.00	3	0.09	0.03
Plow, moldboard	:2-14 inch	1.0	1.48	1.42	60	.89	.85
Disk, tandem	: 8-foot	1.2	.47	.45	86	.48	.46
Disk, single	: 8-foot	2.5	.44	.42	8	.09	.08
Harrow, spiketooth	:15-foot	1.6	.23	.21	51	.19	.17
Harrow, springtooth	:11-foot	1.3	.26	.24	12	.04	.04
Fertilize, spreader	:10-foot	1.0	.52	.28	9	.05	.03
Seed, drill	:11-foot	1.0	.58	.55	100	.58	.55
Total preharvest	:					2.41	2.21
Windrow	:12-foot	1.0	.56	.50	11	.06	.06
Combine	: 6-foot	1.0	.78	.64	56	.44	.36
Combine, self-propelled	:12-foot	1.0	.54	.44	12	.06	---
Combine, contract	: 6-foot	1.0	.73	.51	32	.23	.16
Haul from combine, t.	:1½-ton	1.0	.60	.60	95	.57	---
Haul, truck, contract	:1½-ton	1.0	.60	.60	5	.03	---
Total harvest	:					1.39	.58
Total 1/	:					3.80	2.79

1/ In addition, truck use averaged 0.60 hour an acre and self-propelled combine 0.05 hour an acre.

OATS: RESOURCES USED IN PRODUCTION, AREA III-A3, 1950

Data presented here are based on a survey in 1951 of 27 farms that produced oats. These farms are located in type-of-farming area III-A3 in north central North Dakota. The production of spring wheat and other small grains is the most important enterprise in this area.

The farms surveyed averaged 848 acres. Cropland comprised about 616 acres. In 1950, 78 acres were in oats and the yield averaged about 35 bushels per acre harvested.

Tractors and motorized equipment provide all of the power used on these farms. The drawbar-horsepower rating of tractors on these farms ranged from 11 to 34; the most common was about 24.

Materials used and contract work hired, 1950 1/

MATERIALS USED

Item	: Unit	: Quantity:	Price	: Cost	: Average	
		per	per	per	Acreage:	cost
		acre	unit	acre	covered:	per acre
		Number	Dollars	Dollars	Percent	Dollars
Seed <u>2/</u>	: Bu.	: 1.9	1.35	2.56	100	<u>2.56</u>
Total materials	:	:				<u>2.56</u>

1/ No contract work was reported on farms surveyed in this area.

2/ Approximately 9 percent of the farmers in this area purchased seed oats.

Man labor, power, and machinery used by operation in producing and harvesting oats, area III-A3, north central North Dakota, 1950

Operation	Size	Time per acre:			Average time per		
	of	Times:	once over		Acreage: acre - all farms		
	equipment:	over	Man	Power	covered:	Man	Tractor
	No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.	
Plow, moldboard	:4-14 inch	1.0	0.51	0.48	53	0.27	0.25
Disk, single	:16-foot	1.4	.13	.13	20	.04	.04
Disk, tandem	:10-foot	1.2	.25	.24	20	.06	.06
Field, cultivate	:11-foot	1.4	.20	.19	19	.05	.05
Harrow, spiketooth	:26-foot	2.0	.09	.08	57	.10	.09
Seed, drill	:12-foot	1.0	.24	.22	57	.14	.13
Plow, pack & pony drill:	4-foot	1.0	.77	.56	43	.33	.24
Total preharvest	:					.99	.86
Swath	:12-foot	1.0	.23	.22	82	.19	.18
Combine, self-propelled:	12-foot	1.0	.48	.44	9	.04	---
Combine	:12-foot	1.0	.50	.46	73	.36	.34
Haul from combine, t.	: ---	1.0	.40	.24	82	.33	---
Bind	: 8-foot	1.0	.78	.42	18	.14	.08
Shock	: ---	1.0	1.52	---	18	.27	---
Haul bundles	: ---	1.0	1.30	.24	18	.23	.04
Thresh	: ---	1.0	.68	.35	18	.12	.06
Haul grain	: ---	1.0	.72	.14	18	.13	.03
Total harvest	:					1.81	.73
Total 1/	:					2.80	1.59

1/ In addition, truck use averaged 0.20 hour an acre and self-propelled combines 0.04 hour an acre.

OATS: RESOURCES USED IN PRODUCTION, AREA III-C2, 1950

The data presented here are based on a survey made in 1951 of 23 farms producing oats. These farms are located in type-of-farming area III-C2, a wheat and range-livestock area in northeastern Montana and southwestern North Dakota.

The farms surveyed averaged 1,212 acres per farm. Cropland comprised about 447 acres. In 1950, 42 acres were in oats, and the yield averaged about 30 bushels per acre.

Tractors provided most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 16 to 29; the most common was about 22.

Materials used and contract work hired, 1950 1/

MATERIALS USED

Item	: Unit	: Quantity:	Price	: Cost	: Average	
		: per	: per	: per	: Acreage:	cost
		: acre	: unit	: acre	: covered:	per acre
		: Number	Dollars	Dollars	Percent	Dollars
Seed <u>2/</u>	: Bu.	: 1.6	0.76	1.22	100	1.22
Twine	: Lb.	: 2.2	.25	.55	60	.33
Total materials	:	:				1.55

1/ No contract work reported on farms surveyed in this area.

2/ Approximately 13 percent of the farmers in this area purchased seed oats.

Man labor, power, and machinery used by operation in producing and
harvesting oats, area III-C2, northeastern Montana and
southwestern North Dakota, 1950

Operation	Size	Time per acre:			Average time per		
	of	Times:	once over		Acreage: acre - all farms		
	equipment:	over	Man	Power:	covered:	Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Plow, moldboard	:3-14 inch	1.0	0.68	0.65	50	0.34	0.33
Plow and pack	:3-14 inch	1.0	.95	.90	17	.16	.15
Disk, tandem	:10-foot	1.0	.33	.32	5	.02	.02
Harrow, spiketooth	:25-foot	2.0	.11	.11	40	.09	.09
Harrow, springtooth	:12-foot	2.0	.19	.18	7	.03	.03
Cultipack	:10-foot	1.0	.35	.34	14	.05	.05
Drill	:10-foot	1.0	.29	.26	76	.22	.20
Plow, pack & pony drill	: 4-foot	1.0	.58	.53	12	.07	.06
Disk and drill	:12-foot	1.0	.29	.26	12	.03	.03
Harrow, spiketooth	:25-foot	1.0	.10	.09	20	.02	.02
Total preharvest	:					1.03	.98
Windrow	:10-foot	1.0	.44	.42	12	.53	.50
Combine	:12-foot	1.0	.40	.36	40	.16	.14
Haul grain, truck	: ---	1.0	.25	.14	40	.10	---
Bind	: 8-foot	1.0	.63	.58	60	.38	.35
Shock by hand	: ---	1.0	.99	---	60	.59	---
Haul bundles, horses	: ---	1.0	1.86	2.50	60	1.12	---
Thresh	: ---	1.0	.55	.24	60	.33	.14
Total harvest	:					3.21	1.13
Total <u>1/</u>	:					4.24	2.11

1/ In addition, horse work averaged 1.50 hours an acre, and truck use 0.06 hour an acre.

OATS: RESOURCES USED IN PRODUCTION, AREA III-E2, 1950

The data presented here are based on a survey of approximately 29 farms in 1951, in eastern North Dakota and western Minnesota.

These farms are in type-of-farming area III-E2, a spring wheat, small grain, livestock, potato, and sugar beet area in the Red River Valley.

The farms surveyed average 506 total acres. In 1950, 437 acres were in crops, including 66 in oats. The average yield of oats was approximately 38 bushels per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 9 to 31; the most common was about 22.

Materials used and contract work hired, 1950

MATERIALS USED

Item	: Unit	: Quantity: per acre	: Price : per unit	: Cost : per acre	: Average : Acreage: covered: per acre	: cost
		: Number	Dollars	Dollars	Percent	Dollars
Home-grown seed	: Bu.	: 2.3	0.75	1.73	85	1.47
Purchased seed	: Bu.	: 2.3	1.10	2.53	15	.38
Manure	: Ton	: 12	1/2.00	24.00	10	2.40
Phosphate fertilizer	: Cwt.	: .85	3.20	2.72	18	.49
Twine	: Lb.	: 3.5	.25	.88	2	.02
Total materials	:	:				4.76

CONTRACT WORK HIRED

Combining	: Acre	: 1.0	3.55	3.55	4	.14
Total contract work	:	:				.14

1/ Estimated.

Man labor, power, and machinery used by operation in producing and
harvesting oats, area III-E2, eastern North Dakota and
western Minnesota, 1950

Operation	: Size	: Time per acre:			: Average time per		
	: of	: Times:	once over	: Acreage:	acre - all farms		
	: equipment:	over	: Man	: Power	: covered:	Man	: Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Apply manure, spreader	: 75-bu.	1.0	3.78	1.73	10	0.38	0.17
Plow, moldboard	: 3-14 inch	1.0	.91	.87	94	.86	.82
Disk, single	: 18-foot	1.8	.15	.15	31	.08	.08
Disk, tandem	: 10-foot	1.3	.30	.28	16	.06	.06
Field cultivate	: 12-foot	1.9	.25	.24	59	.28	.27
Harrow, spiketooth	: 30-foot	1.5	.08	.07	89	.11	.09
Harrow, springtooth	: 16-foot	1.0	.25	.24	14	.04	.03
Seed, drill	: 14-foot	1.0	.21	.19	100	.21	.19
Harrow, spiketooth	: 30-foot	1.0	.09	.08	68	.06	.05
Total preharvest	:					2.08	1.76
Swath	: 12-foot	1.0	.22	.21	96	.21	.20
Combine	: 10-foot	1.0	.44	.37	72	.32	.27
Combine, self-propelled	: 12-foot	1.0	.23	.21	22	.05	---
Combine, contract	: 10-foot	1.0	.62	.57	4	.02	.02
Haul from combine, t.	: ---	1.0	.40	.27	92	.37	---
Haul to mill, truck	: ---	1.0	.28	.18	6	.02	---
Bind	: 8-foot	1.0	.87	.80	2	.02	.02
Shock by hand	: ---	1.0	1.90	---	2	.04	---
Haul bundles	: ---	1.0	2.64	1.08	2	.05	.02
Thresh	: 26-inch	1.0	1.20	.53	2	.02	.01
Total harvest	:					1.12	.54
Total 1/	:					3.20	2.30

1/ In addition, truck use averaged 0.26 hour an acre, and self-propelled combines were used 0.05 hour an acre.

OATS: RESOURCES USED IN PRODUCTION, AREA III-E3, 1949

The data presented here are based on a 1950 survey of 34 farms that produced oats in 1949. These farms are located in southeastern North Dakota and east-north central South Dakota. This is a transition area between the Corn Belt and the Northern Plains wheat area. Wheat, flax, corn, hay and other feed crops, and livestock are important products of these farms.

The farms surveyed averaged 543 total acres of which 339 were in crops in 1949. The planted acreage of oats averaged 58 per farm and harvested acreage was 53. The average yield of oats was 18 bushels per harvested acre.

Tractors and motorized equipment provided nearly all of the power used in the production of oats. Horses were used only for hauling bundles on a few of the farms where oats were threshed. The drawbar-horsepower rating of tractors used on these farms ranged from 10 to 27; the most common was about 19.

Materials used and contract work hired, 1949 1/

MATERIALS USED

Item	: Unit	: Quantity:	Price	: Cost	: Average	
		: per	: per	: per	: Acreage:	cost
		: acre	: unit	: acre	: covered:	per acre
		: Number	Dollars	Dollars	Percent	Dollars
Home-grown seed	: Bu.	: 2.0	0.60	1.20	88	1.06
Purchased seed	: Bu.	: 2.0	1.10	2.20	12	.26
Twine	: Lb.	: 1.6	.22	.35	48	.17
Total materials	:	:				1.49

1/ About 8 percent of the threshing was done by contract. The average cost per acre could not be determined because the few cases reporting were divided between charges per bushel and per hour, with varying amounts of labor included.

Man labor, power, and machinery used by operation in producing and harvesting oats, area III-E3, southeastern North Dakota and east-north central South Dakota, 1949

Operation	: Size	:Time per acre:				:Average time per	
	: of	:Times:	once over		:Acreage:	acre - all farms	
	: equipment:	over	Man	Power	covered:	Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Plow, moldboard	:2-16 inch	1.0	1.02	0.98	23	0.23	0.23
Plow, moldboard	:3-14 inch	1.0	.77	.74	48	.37	.36
Plow, moldboard	:4-14 inch	1.0	.55	.52	18	.10	.09
Disk, single	:16-foot	1.2	.23	.22	21	.06	.06
Disk, tandem	:10-foot	1.3	.37	.35	22	.11	.10
Harrow, spiketooth	:27-foot	1.5	.14	.13	89	.19	.17
Field cultivate	: 8-foot	1.1	.41	.40	18	.08	.08
Haul and clean seed, t.	: ---	1.0	.02	.02	65	.01	---
Seed, drill	:11-foot	1.0	.31	.29	100	.31	.29
Harrow	:27-foot	1.0	.14	.13	58	.08	.08
Total preharvest	:					1.54	1.47
Windrow	:12-foot	1.0	.28	.25	52	.15	.13
Combine	: 6-foot	1.0	.50	.46	39	.20	.18
Haul from combine, t.	:1½-ton	1.0	.42	.21	39	.16	---
Combine	:12-foot	1.0	.35	.32	3	.01	.01
Combine, self-propelled	:12-foot	1.0	.35	.32	10	.04	---
Haul from combine, t.	:1½-ton	1.0	.29	.22	13	.04	---
Bind	: 8-foot	1.0	.71	.46	18	.13	.08
Bind	:10-foot	1.0	.52	.40	30	.16	.12
Shock by hand	: ---	1.0	1.16	---	40	.46	---
Haul bundles	: ---	1.0	1.28	.83	6	.08	.05
Haul bundles, horses	: ---	1.0	4.08	5.96	42	1.71	---
Thresh	:26-inch	1.0	.22	.19	48	.11	.09
Haul grain	: ---	1.0	.18	.08	48	.09	.04
Elevate grain	: ---	1.0	.18	.08	48	.09	.04
Total harvest	:					3.43	.74
Total 1/	:					4.97	2.21

1/ In addition, horse work averaged 2.50 hours an acre, self-propelled combine 0.03 hour an acre, and truck use 0.12 hour an acre.

OATS: RESOURCES USED IN PRODUCTION, AREA V-A1, 1949

The data presented here are based on a survey of approximately 83 farms producing oats in western Iowa, eastern Nebraska, southeastern South Dakota, and northeastern Kansas. The farms are located in type-of-farming area V-A1, a cattle feeding and hog area in the Missouri River Valley.

The farms surveyed averaged 264 total acres. In 1949, 215 acres were in crops, including 46 acres of oats. The average yield of oats was approximately 30 bushels per acre.

Tractors provided most of power used on these farms. They were used for the operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 10 to 27; the most common was about 19.

Materials used and contract work hired, 1949

MATERIALS USED

Item	: Unit	: Quantity : per acre	: Price : per unit	: Cost : per acre	: Average : Acreage : covered	: cost : per acre
		: Number	Dollars	Dollars	Percent	Dollars
Seed <u>1</u> /	: Bu.	: 2.7	0.95	2.56	100	2.56
Ceresan	: Bu.	: 2.7	.04	.11	36	.04
Manure	: Ton	: 6	<u>2</u> /2.00	12.00	4	.48
Mixed fertilizer	: Cwt.	: 2.05	2.00	4.10	12	.49
Spray (2,4-D)	: Pt.	: .5	.62	.31	9	.03
Twine	: Lb.	: 2.2	.26	.57	26	.15
Total materials						3.75

CONTRACT WORK HIRED

Combining	: Acre	: 1.0	4.00	4.00	8	.32
Threshing	: Bu.	: 30	.04	1.20	16	.19
Total contract work						.51

1/ Approximately 19 percent of the farmers purchased seed oats.

2/ Estimated.

Man labor, power, and machinery used by operation in producing and harvesting oats, area V-A1, western Iowa, eastern Nebraska, southeastern South Dakota, and northeastern Kansas, 1949

Operation	Size	Time per acre:			Average time per		
	of	Times:	once over	Acreage:	acre - all farms		
	equipment:	over	Man	Power	covered:	Man	Tractor
	No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.	
Cut stalks	: 4-row	1.0	0.38	0.36	2	0.01	0.01
Apply manure, loader-sp.	: ---	1.0	3.95	3.59	4	.16	.14
Fertilize, spreader	: ---	1.0	.33	.32	12	.04	.04
Plow, moldboard	: 2-16 inch	1.0	1.02	.98	14	.14	.14
Disk, single	: 15-foot	2.1	.21	.20	84	.37	.35
Disk, tandem	: 9-foot	1.8	.31	.30	8	.04	.04
Harrow	: 20-foot	1.6	.14	.13	86	.19	.18
Clean and treat seed	: ---	1.0	.08	---	36	.03	---
Seed, endgate	: ---	1.0	.30	.18	49	.15	.09
Seed, endgate, horses	: ---	1.0	.22	.37	10	.02	---
Seed, drill	: 10-foot	1.0	.38	.36	41	.16	.15
Cultipack	: 15-foot	1.0	.18	.18	16	.03	.03
Spray	: 24-foot	1.0	.26	.22	9	.02	.02
Pull weeds	: ---	1.0	1.06	---	1	.01	---
Total preharvest	:					1.37	1.19
Windrow	: 9-foot	1.0	.43	.37	45	.19	.17
Combine	: 5-foot	1.0	.68	.65	66	.45	.43
Combine, contract	: 5-foot	1.0	.68	.65	8	.05	.05
Haul from combine	: ---	1.0	.22	.22	74	.16	.16
Bind	: 8-foot	1.0	1.17	.56	26	.30	.15
Shock by hand	: ---	1.0	.92	---	26	.24	---
Haul bundles	: ---	1.0	1.40	.96	13	.18	.12
Haul bundles, horses	: ---	1.0	1.52	2.64	13	.20	---
Thresh	: ---	1.0	.43	.24	10	.04	.02
Thresh, contract	: ---	1.0	.43	.24	16	.07	.04
Haul grain	: ---	1.0	.43	.41	26	.11	.11
Total harvest	:					1.99	1.25
Total 1/	:					3.36	2.44

1/ In addition, horse work averaged 0.38 hour an acre.

OATS: RESOURCES USED IN PRODUCTION, AREA V-F⁴, 1949

The data presented here are based on a survey made in 1950 of approximately 42 farms producing oats in 1949 in northeastern South Dakota and west central Minnesota. These farms are located in type-of-farming area V-F⁴, a livestock and cash-grain area in the northwestern Corn Belt Fringe.

The farms surveyed averaged 335 total acres per farm. In 1949, 262 acres were in crops, including 70 in oats. The average yield of oats was approximately 32 bushels per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The drawbar-horsepower rating of the tractors ranged from 15 to 27; the most common was about 20.

Materials used and contract work hired, 1949

MATERIALS USED

Item	: Unit	: Quantity per acre	: Price per unit	: Cost per acre	: Average Acreage covered	: Average cost per acre
		: Number	: Dollars	: Dollars	: Percent	: Dollars
Seed	: Bu.	: 2.8	1.30	3.64	100	3.64
Ceresan	: Bu.	: 2.8	.04	.11	25	.03
Manure	: Ton	: 7	<u>1/</u> 2.00	14.00	6	.84
Mixed fertilizer	: Cwt.	: 1.45	3.00	4.35	4	.17
Spray (2,4-D)	: Pt.	: 1.0	.75	.75	23	.17
Twine	: Lb.	: 2.6	.22	.57	50	.28
Total materials	:	:	:	:	:	5.13

CONTRACT WORK HIRED

Cleaning & treating seed	: Bu.	: 2.8	.05	.13	18	.02
Combining	: Acre	: 1.0	3.35	3.35	14	.47
Threshing	: Bu.	: 32	.04	1.28	28	.36
Total contract work	:	:	:	:	:	.85
<u>1/</u> Estimated.						

Man labor, power, and machinery used by operation in producing and harvesting oats, area V-F4, northeastern South Dakota and west central Minnesota, 1949

Operation	: Size : : of : : equipment:	: Time per acre: : Times: once over : : over : Man : Power : covered:	: Average time per : acre - all farms : Man : Tractor				
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Apply manure, spreader	: ---	1.0	4.27	2.78	6	0.26	0.17
Plow, moldboard	: 2-16 inch	1.0	1.14	1.09	15	.17	.16
Plow, moldboard	: 3-14 inch	1.0	.78	.75	47	.37	.35
Field cultivate	: 10-foot	1.0	.49	.47	36	.18	.17
Disk, tandem	: 9-foot	1.7	.39	.37	10	.07	.06
Disk, single	: 15-foot	2.0	.23	.22	61	.28	.27
Harrow, spiketooth	: 25-foot	1.7	.12	.11	74	.15	.14
Clean seed	: ---	1.0	.13	---	32	.04	---
Clean and treat seed	: ---	1.0	.13	---	7	.01	---
Clean & treat seed, c.	: ---	1.0	.13	---	18	.02	---
Seed, drill	: 11-foot	1.0	.32	.30	92	.29	.28
Seed, endgate	: ---	1.0	.26	.12	8	.02	.01
Harrow, spiketooth	: 25-foot	1.2	.12	.11	45	.06	.06
Weed by hand	: ---	1.0	.92	---	6	.06	---
Spray	: 30-foot	1.0	.22	.15	23	.05	.03
Total preharvest	:					2.03	1.70
Windrow	: 12-foot	1.0	.30	.29	42	.13	.12
Combine	: 6-foot	1.0	.64	.58	12	.08	.07
Combine	: 12-foot	1.0	.43	.40	22	.09	.09
Combine, self-propelled	: 12-foot	1.0	.31	.29	2	.01	---
Combine, contract	: 6-foot	1.0	.64	.58	14	.09	.08
Haul from combine	: ---	1.0	.25	.12	25	.06	.03
Haul from combine, truck	: ---	1.0	.25	.12	25	.06	---
Bind	: 8-foot	1.0	.70	.50	27	.19	.14
Bind	: 10-foot	1.0	.78	.40	23	.18	.09
Shock by hand	: ---	1.0	.78	---	50	.39	---
Haul bundles	: ---	1.0	1.45	.94	3	.04	.03
Haul bundles, horses	: ---	1.0	1.17	2.00	39	.46	---
Haul bundles, haybuck	: ---	1.0	.95	.36	8	.08	.03
Thresh	: 28-inch	1.0	.23	.20	22	.05	.04
Thresh, contract	: 28-inch	1.0	.23	.20	28	.06	.06
Haul grain	: ---	1.0	.20	.17	46	.09	.08
Haul grain, contract	: ---	1.0	.20	.17	4	.01	.01
Total harvest	:					2.07	.87
Total 1/	:					4.10	2.57

1/ In addition, horse work averaged 0.78 hour an acre, truck use 0.03 hour an acre, and self-propelled combine 0.01 hour an acre.

OATS: RESOURCES USED IN PRODUCTION, AREA V-G1, 1949

The data presented here are based on a survey of approximately 48 farms, in 1950, in western Missouri and eastern Kansas. These farms are located in type-of-farming area V-G1, a livestock, cash-grain, and dairy area.

The farms surveyed averaged 286 total acres. In 1949, 183 acres were in crops, including 31 in oats. The average yield of oats was 26 bushels an acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 12 to 26; the most common was 20,

Materials used and contract work hired, 1949

MATERIALS USED

Item	: Unit	: Quantity per acre	: Price per unit	: Cost per acre	: Average Acreage covered	: cost per acre
		: Number	: Dollars	: Dollars	: Percent	: Dollars
Seed <u>1/</u>	: Bu.	: 2.5	1.15	2.88	100	2.88
Mixed fertilizer (4-12-4)	: Cwt.	: 1.30	2.35	3.06	26	.80
Phosphate fertilizer	: Cwt.	: 1.15	2.80	3.22	13	.42
Twine	: Lb.	: 1.9	.20	.38	18	.07
Total materials	:	:				<u>4.17</u>

CONTRACT WORK HIRED

Combining	: Acre	: 1.0	4.15	4.15	9	.37
Threshing	: Bu.	: 26	.06	1.56	7	.11
Total contract work	:	:				<u>.48</u>

1/ Approximately 20 percent of the farmers in this area purchased seed oats.

Man labor, power, and machinery used by operation in producing and
harvesting oats, area V-G1, western Missouri and
eastern Kansas, 1949

Operation	: Size :	:Time per acre:			: Average time per		
	: of :	:Times:	: once over		:Acreage:	: acre - all farms	
	:equipment:	:over :	: Man	:Power	:covered:	: Man:	:Tractor:
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Plow, moldboard	:2-14 inch	1.0	1.06	1.01	36	0.38	0.36
Disk, tandem	: 8-foot	2.3	.40	.38	62	.57	.54
Disk, single	:14-foot	3.3	.28	.26	34	.31	.29
Harrow, spiketooth	:15-foot	1.6	.24	.22	74	.28	.26
Disk and harrow	: 8-foot	1.0	.46	.44	5	.02	.02
Fertilize, endgate, h.	: ---	2.0	.39	.72	3	.02	0.04
Seed, drill	: 8-foot	1.0	.42	.40	74	.31	.30
Seed, endgate	: ---	1.0	.49	.47	8	.04	.04
Seed, endgate, horses	: ---	1.0	.30	.58	18	.05	.10
Total preharvest	:					1.98	1.81
Combine	: 5-foot	1.0	.84	.68	73	.61	.50
Combine, contract	: 5-foot	1.0	.84	.68	9	.08	.06
Haul from combine, t.	:1½-ton	1.0	.84	.68	82	.69	---
Bind	: 9-foot	1.0	.46	.37	18	.08	.07
Shock by hand	: ---	1.0	.62	---	18	.11	---
Haul bundles, horses	: ---	1.0	1.45	2.77	18	.26	.50
Thresh	:26-inch	1.0	.33	.25	11	.04	.03
Thresh, contract	:26-inch	1.0	.26	.19	7	.02	.01
Haul grain, horses	: ---	1.0	.59	.57	18	.11	.10
Total harvest	:					2.00	.67
Total 1/	:					3.98	2.48

1/ In addition, truck use averaged 0.56 hour an acre.

OATS: RESOURCES USED IN PRODUCTION, AREA VI-E1, 1949

The data presented here are based on a survey in 1950 of 40 farms producing oats in central Texas. These farms are located in type-of-farming area VI-E1, a livestock and cash grain area in the Grand Prairie of Texas.

The farms surveyed averaged 444 acres per farm. Cropland comprised 147 acres. In 1949, approximately 41 acres were in oats and the yield averaged 24 bushels per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The drawbar-horsepower rating of these tractors ranged from 10 to 26; the most common was about 17.

Materials used and contract work hired, 1949

MATERIALS USED

Item	: Unit	: Quantity per acre	: Price per unit	: Cost per acre	: Average Acreage covered	: Average cost per acre
		: Number	: Dollars	: Dollars	: Percent	: Dollars
Seed ^{1/}	: Bu.	: 2.3	1.25	2.88	100	2.88
Phosphate fertilizer	: Cwt.	: 1.70	1.85	3.14	6	.19
Twine	: Lb.	: 1.5	.25	.38	27	.10
Sacks	: No.	: 5	.20	1.00	18	.18
Total materials						3.35

CONTRACT WORK HIRED

Combining	: Acre	: 1.0	2.95	2.95	33	.97
Threshing	: Bu.	: 24	.12	2.88	27	.78
Hauling	: Bu.	: 24	.03	.72	17	.12
Total contract work:						1.87

^{1/} Approximately 42 percent of the farmers in this area purchased seed oats.

Man labor, power, and machinery used by operation in producing and harvesting oats, area VI-El, central Texas, 1949

Operation	Size	Time per acre:			Average time per		
	of	Times:	once over		Acreage:	acre - all farms	
	equipment:	over	Man	Power	covered:	Man	Tractor
	No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.	
Plow, one-way	: 5-foot	1.5	0.77	0.74	65	0.75	0.72
Plow, disk	: 3-disk	1.1	1.11	1.06	61	.74	.71
Disk, tandem	: 7-foot	1.1	.52	.49	33	.19	.18
Harrow, spiketooth	: 12-foot	1.2	.33	.31	36	.14	.13
Harrow, springtooth	: 6-foot	1.2	.35	.32	11	.05	.04
Seed, drill	: 9-foot	1.0	.46	.42	100	.46	.42
Total preharvest	:					2.33	2.20
Combine	: 6-foot	1.0	.94	.57	40	.38	.23
Combine, contract	: 6-foot	1.0	1.10	.51	33	.36	.17
Bind	: 7-foot	1.0	.67	.50	27	.18	.14
Shock by hand	: ---	1.0	1.51	---	27	.41	---
Haul bundles	: ---	1.0	1.67	.16	18	.30	.03
Haul bundles, horses	: ---	1.0	1.27	.84	9	.12	---
Thresh, contract	: 22-inch	1.0	.86	.30	27	.23	.08
Haul grain	: ---	1.0	.20	.14	76	.15	.11
Haul to town, truck	: 1½-ton	1.0	.20	.13	7	.01	---
Haul to town, truck, c.	: 1½-ton	1.0	.13	.13	17	.01	---
Total harvest	:					2.15	.84
Total 1/	:					4.48	3.04

1/ In addition, truck use averaged 0.02 hour an acre, and horse work 0.08 hour an acre.

OATS: RESOURCES USED IN PRODUCTION, AREA VI-E2, 1950

The data presented here are based on a survey in 1950 of 49 farms that produced oats. These farms are located in type-of-farming area VI-E2, a general farming area in southeastern Kansas and northeastern Oklahoma.

The farms surveyed averaged 247 total acres. In 1950, 121 acres were in crops, including 29 acres in oats. The yield of oats averaged about 27 bushels per acre.

Tractors and motorized equipment provided most of the power used on these farms. Horses were used for hauling bundles on the farms where oats were threshed. The drawbar-horsepower rating of these tractors ranged from 11 to 25; the most common was about 18.

Materials used and contract work hired, 1950

MATERIALS USED

Item	: Unit	: Quantity per acre	: Price per unit	: Cost per acre	: Average acreage covered	: Average cost per acre
		: Number	: Dollars	: Dollars	: Percent	: Dollars
Seed ^{1/}	: Bu.	: 2.5	1.20	3.00	100	3.00
Fertilizer (4-12-4)	: Cwt.	: 1.25	2.15	2.69	12	.32
Phosphate fertilizer	: Cwt.	: 1.10	2.05	2.26	25	.57
Twine	: Lb.	: 2.0	.27	.54	16	.09
Total materials	:	:				3.98

CONTRACT WORK HIRED

Combining	: Acre	: 1.0	3.35	3.35	22	.74
Total contract work:	:	:				.74

^{1/} Approximately 26 percent of the farmers in this area purchased seed oats.

Man labor, power, and machinery used by operation in producing and
harvesting oats, area VI-E2, southeastern Kansas and
northeastern Oklahoma, 1950

Operation	: Size : of : equipment:	: Times: : over :	:Time per acre:			:Average time per	
			once over	Man	Power	acreage covered:	Man : Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Plow, moldboard	: 2-14 inch	1.0	1.25	1.20	80	1.00	0.96
Disk, tandem	: 7-foot	1.5	.49	.47	57	.42	.40
Disk, single	: 10-foot	2.4	.39	.37	43	.40	.38
Harrow, spiketooth	: 12-foot	1.2	.35	.32	83	.35	.32
Seed, endgate	: ---	1.0	.32	.31	11	.04	.03
Seed, drill	: 8-foot	1.0	.54	.50	89	.48	.44
Total preharvest	:					2.69	2.53
Swath	: 7-foot	1.0	.64	.56	15	.10	.08
Combine, power take-off	: 6-foot	1.0	.97	.78	62	.60	.48
Combine, contract	: 8-foot	1.0	.78	.71	22	.17	.16
Haul from combine, truck	: 1-ton	1.0	.70	.70	84	.59	---
Bind	: 9-foot	1.0	1.05	.55	16	.17	.09
Shock by hand	: ---	1.0	.87	---	16	.14	---
Haul bundles, horses	: ---	1.0	2.83	2.93	16	.45	---
Thresh	: 22-inch	1.0	.51	.35	16	.08	.06
Haul grain, truck	: 1-ton	1.0	.40	.40	16	.06	---
Total harvest	:					2.36	.87
Total 1/	:					5.05	3.40

1/ In addition, horse work averaged 0.47 hour an acre and truck use 0.65 hour an acre.

OATS: RESOURCES USED IN PRODUCTION, AREA VII-A2, 1949

Data presented here are based on a survey in 1950 of 32 farms producing oats in east central Texas. These farms are located in type-of-farming area VII-A2, a specialized cotton area in the Black Waxy Prairie.

The farms surveyed averaged 337 acres. In 1949, 211 acres were in crops, including 78 acres in oats. The yield of oats averaged about 31 bushels per acre.

Tractors and motorized equipment provided all of the power used in producing oats. The drawbar-horsepower rating of tractors ranged from 9 to 26; the most common was about 18.

Materials used and contract work hired, 1949

MATERIALS USED

Item	: Unit	: Quantity: per acre	: Price : per unit	: Cost : per acre	: Average : Acreage: covered: percent	: cost : per acre
		: Number	: Dollars	: Dollars	: Percent	: Dollars
Seed ¹ / ₁	: Bu.	: 2.6	1.30	3.38	100	3.38
Twine	: Lb.	: 2.0	.23	.46	72	.35
Sacks	: No.	: 12	.15	1.80	9	.16
Total materials	:	:				3.89

CONTRACT WORK HIRED

Combining	: Acre	: 1.0	3.90	3.90	10	.39
Threshing	: Bu.	: 31	.14	4.34	64	2.78
Hauling	: Bu.	: 31	.04	1.24	39	.48
Total contract work	:	:				3.65

¹/₁ Approximately 23 percent of the farmers in this area purchased seed oats.

Man labor, power, and machinery used by operation in producing and harvesting oats, area VII-A2, east central Texas, 1949

Operation	: Size :	:Time per acre:			:Average time per		
	: of :	:Times:	once over		:Acreage:	acre - all farms	
	:equipment:	:over :	Man	Power	:covered:	Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Cut stalks	: 4-row	1.0	0.25	0.24	6	0.02	0.01
Plow, disk	: 3-disk	1.1	1.33	1.16	40	.58	.51
Plow, one-way	: 5-foot	1.7	.85	.74	71	1.02	.88
Disk, tandem	: 8-foot	1.2	.55	.47	31	.20	.17
Harrow, spiketooth	: 12-foot	1.0	.23	.21	30	.07	.06
Harrow, springtooth	: 7-foot	1.0	.38	.35	5	.02	.02
Seed, drill	: 10-foot	1.0	.44	.42	100	.44	.42
Total preharvest	:					2.35	2.07
Bind	: 8-foot	1.0	1.04	.47	72	.75	.34
Shock by hand	: ---	1.0	1.49	---	48	.72	---
Haul bundles	: ---	1.0	1.64	.61	72	1.18	.44
Thresh	: ---	1.0	.48	.23	8	.04	.02
Thresh, contract	: ---	1.0	.48	.23	49	.24	.11
Thresh into bin, contract	: ---	1.0	.99	.22	15	.15	.03
Swath	: 10-foot	1.0	.81	.39	13	.11	.05
Combine	: 5-foot	1.0	.94	.62	18	.17	.11
Combine, contract	: 5-foot	1.0	1.61	.62	10	.16	.06
Haul grain	: ---	1.0	.30	.17	46	.14	.08
Haul, truck, contract	: ---	1.0	.15	.15	39	.06	---
Total harvest	:					3.72	1.24
Total 1/	:					6.07	3.31

1/ In addition, truck use averaged 0.06 hour an acre.

OATS: RESOURCES USED IN PRODUCTION, AREA VII-G2, 1949

The data presented here are based on a survey in 1950 of 31 farms producing oats in central Oklahoma. These farms are located in type-of-farming area VII-G2, a cotton and wheat producing area in the Mixed Prairies and Cross Timbers section of Oklahoma.

The farms surveyed averaged 297 acres per farm. In 1949, 130 acres were in crops including 31 acres in oats. The yield of oats averaged about 19 bushels per harvested acre.

Tractors provided most of the power used in producing oats. Horses were used for hauling on some farms where oats were threshed. The drawbar-horsepower rating of tractors on these farms ranged from 11 to 26; the most common was about 19.

Materials used and contract work hired, 1949

MATERIALS USED

Item	: Unit	: Quantity per acre	: Price per unit	: Cost per acre	: Average Acreage covered	: Average cost per acre
		: Number	Dollars	Dollars	Percent	Dollars
Home-grown seed	: Bu.	: 2.1	1.50	3.15	100	3.15
Superphosphate fertilizer	: Cwt.	: 1.30	1.55	2.02	7	.14
Twine	: Lb.	: 2.1	.26	.55	31	.17
Total materials	:	:				3.46

CONTRACT WORK HIRED

Combining	: Acre	: 1.0	3.65	3.65	17	.62
Threshing	: Bu.	: 19	.05	.95	27	.26
Total contract work	:	:				.88

Man labor, power, and machinery used by operation in producing
and harvesting oats, area VII-G2, central Oklahoma, 1949

Operation	Size	Time per acre:		Average time per		Acreage:acre - all farms	
	of	Times:	once over	Man	Power	covered:	Man : Tractor
	equipment:	over	Man	Power	covered:	Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Plow, moldboard	:2-14 inch	1.0	1.09	1.04	68	0.74	0.71
Plow, one-way	: 6-foot	1.2	.47	.45	32	.18	.17
Plow, disk	: 3-disk	1.0	1.32	1.26	8	.11	.10
Disk, tandem	: 7-foot	1.1	.46	.44	56	.29	.27
Harrow, spiketooth	:12-foot	1.4	.31	.28	60	.26	.23
Harrow, springtooth	: 7-foot	1.7	.37	.34	28	.18	.16
Seed, drill	:10-foot	1.0	.44	.40	100	.44	.40
Total preharvest	:					2.20	2.04
Combine	: 6-foot	1.0	.59	.54	52	.31	.28
Combine, contract	: 6-foot	1.0	.83	.76	17	.14	.13
Bind	:10-foot	1.0	.68	.46	31	.21	.14
Shock by hand	: ---	1.0	1.24	---	31	.38	---
Haul bundles	: ---	1.0	1.47	.16	25	.37	.04
Haul bundles, h.	: ---	1.0	2.64	2.22	6	.16	---
Thresh	: ---	1.0	.70	.32	4	.03	.01
Thresh, contract	: ---	1.0	.65	.30	27	.18	.08
Haul	: ---	1.0	.14	.09	87	.12	.08
Haul to town, truck	: ---	1.0	.14	.14	13	.02	---
Total harvest	:					1.92	.76
Total <u>1/</u>	:					4.12	2.80

1/ In addition, horse work averaged 0.13 hour an acre and truck use 0.02 hour an acre.

PEANUTS: RESOURCES USED IN PRODUCTION, AREA VI-E1, 1949

The data presented here are based on a survey in 1950 of 30 farms producing peanuts in central Texas. These farms are located in type-of-farming area VI-E1, a livestock and cash-grain area in the Grand Prairie of Texas.

The farms surveyed averaged 288 acres per farm. Cropland comprised 104 acres. In 1949, approximately 30 acres were in peanuts and the yield averaged 657 pounds per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The drawbar-horsepower rating of these tractors ranged from 10 to 26; the most common was about 15.

Materials used and contract work hired, 1949

MATERIALS USED

Item	: Unit	: Quantity: per acre	: Price : per unit	: Cost : per acre	: Average : Acreage: covered	: cost : per acre
		: Number	Dollars	Dollars	Percent	Dollars
Seed	: Lb.	: 28	0.20	5.60	100	5.60
Mixed fertilizer (4-12-4)	: Cwt.	: 1.20	2.10	2.52	26	.66
Phosphate fertilizer(20%)	: Cwt.	: 2.00	1.10	2.20	8	.18
Sacks	: No.	: 12	.10	1.20	100	1.20
Total materials	:	:				7.64

CONTRACT WORK HIRED

Combining	: Bu.	: 22	.32	7.04	74	5.21
Hauling	: Bu.	: 22	.03	.66	60	.40
Total contract work	:	:				5.61

Man labor, power, and machinery used by operation in producing and harvesting peanuts, area VI-E1, central Texas, 1949

Operation	Size	Time per acre:			Average time per		
	of	Times:	once over		Acreage:acre - all farms		
	equipment:	over	Man	Power	covered:	Man	Tractor
	No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.	
Plow, disk	3-disk	1.0	0.78	0.75	23	0.18	0.17
List	2-row	2.2	.64	.61	82	1.16	1.10
List	1-row	2.2	1.21	1.16	10	.27	.26
Disk, tandem	7-foot	1.0	.51	.48	5	.03	.02
Harrow, spiketooth	8-foot	1.0	.40	.37	12	.05	.04
Cultivate	2-row	1.8	.67	.64	54	.65	.62
Plant	2-row	1.0	.67	.61	96	.64	.59
Plant, horses	1-row	1.0	1.53	2.79	4	.06	---
Harrow, spiketooth	8-foot	3.3	.37	.34	8	.10	.09
Cultivate	2-row	3.3	.67	.64	96	2.12	2.03
Cultivate, horses	1-row	3.5	1.46	2.79	4	.20	---
Hoe by hand	---	1.2	6.96	---	93	7.77	---
Total preharvest						13.23	4.92
Dig	2-row	1.0	.61	.58	96	.59	.56
Dig, horses	1-row	1.0	1.46	2.79	4	.06	---
Rake, side-delivery	8-foot	1.0	.42	.41	100	.42	.41
Combine	6-foot	1.0	2.21	.65	26	.57	.17
Combine, contract	6-foot	1.0	2.54	.59	74	1.88	.44
Haul to barn	---	1.0	.62	.39	34	.21	.13
Haul to town, truck	---	1.0	.20	.12	6	.01	---
Haul to town, t.,contract:	---	1.0	.12	.12	60	.07	---
Total preharvest						3.81	1.71
Total <u>1/</u>						17.04	6.63

1/ In addition, horse work averaged 0.61 hour an acre and truck use 0.08 hour an acre.

PEANUTS: RESOURCES USED IN PRODUCTION, AREA VII-A2, 1949

Data presented here are based on a survey in 1950 of 30 farms producing peanuts in east central Texas. These farms are located on the lighter soils in type-of-farming area VII-A2, a specialized cotton area in the Black Waxy Prairie.

The farms surveyed averaged 196 acres. In 1949, 95 acres were in crops, including 28 acres in peanuts. The yield of peanuts averaged about 847 pounds per acre.

Tractors provided most of the power used on these farms. Horse-drawn equipment was still being used on approximately 6 percent of the farms surveyed; all tractor work in these cases was hired. The drawbar-horsepower rating of tractors ranged from 9 to 21; the most common was about 14.

Materials used and contract work hired, 1949

MATERIALS USED

Item	: Unit	: Quantity:	Price :	Cost :	:Average	
		: per	per	per	:Acreage:	cost
		: acre	: unit	: acre	:covered:	per acre
		: Number	Dollars	Dollars	Percent	Dollars
Seed <u>1</u> /	: Lb.	: 28	0.20	5.60	100	5.60
Mixed fertilizer	: Cwt.	: 1.30	2.10	2.73	42	1.15
Phosphate fertilizer	: Cwt.	: 1.50	1.55	2.32	2	.05
Sacks	: No.	: 12	.14	1.68	99	1.66
Total materials	:	:				8.46

CONTRACT WORK HIRED

Threshing	: Bu.	: 28.0	.20	5.60	43	2.41
Combining	: Bu.	: 28.0	.35	9.80	9	.88
Total contract work	:	:				3.29

1/ Approximately 79 percent of the farmers in this area purchased peanut seed.

Man labor, power, and machinery used by operation in producing and
harvesting peanuts, area VII-A2, east central Texas, 1949

Operation	: Size : of : equipment:	: Times: : over	: Time per acre:			: Average time per		
			: once over		: Acreage:	: acre - all farms		
			: Man	: Power	: covered:	: Man	: Tractor	: Horse
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.	Hrs.
Cut stalks	: 2-row	1.0	0.56	0.54	25	0.14	0.14	---
Plow, moldboard	: 2-14 inch	1.0	1.31	1.25	44	.58	.55	---
Plow, disk	: 3-disk	1.0	.98	.93	15	.15	.14	---
Plow, moldboard, h.	: 1-12 inch	1.0	4.72	11.71	4	.19	---	0.47
List	: 2-row	1.6	.82	.79	46	.60	.58	---
List, horses	: 1-row	1.7	2.54	5.59	3	.13	---	.28
Disk, tandem	: 7-foot	1.4	.69	.66	25	.24	.23	---
Harrow, spiketooth	: 8-foot	1.0	.41	.38	31	.13	.12	---
Cultivate	: 2-row	1.6	.65	.62	55	.57	.54	---
Cultivate, horses	: 1-row	1.0	2.20	4.83	4	.09	---	.19
Plant	: 2-row	1.0	.80	.74	95	.76	.70	---
Plant, horses	: 1-row	1.0	2.43	5.09	5	.12	---	.25
Harrow, spiketooth	: 8-foot	1.0	.40	.37	15	.06	.06	---
Cultivate	: 2-row	3.2	.68	.65	94	2.05	1.96	---
Cultivate, horses	: 1-row	2.6	2.29	4.81	6	.36	---	.75
Hoe by hand	: ---	1.0	5.85	---	73	4.27	---	---
Total preharvest	:					10.44	5.02	1.94
Dig	: 2-row	1.0	.65	.62	95	.62	.59	----
Dig, horses	: 1-row	1.0	2.20	4.20	5	.11	---	.21
Rake, side-delivery	: 9-foot	1.0	.48	.47	98	.47	.46	---
Stack by hand	: ---	1.0	2.98	---	50	1.49	---	---
Haul stacks	: ---	1.0	.57	.28	77	.44	.22	---
Haul stacks, h.	: ---	1.0	2.80	3.53	23	.64	---	.81
Thresh	: ---	1.0	3.10	.66	48	1.49	.32	---
Thresh, contract	: ---	1.0	4.61	.65	43	1.98	.28	---
Combine, contract	: 5-foot	1.0	1.54	.70	9	.14	.06	---
Haul	: ---	1.0	1.32	.20	77	1.02	.15	---
Haul, horses	: ---	1.0	.99	2.28	23	.23	---	.52
Total harvest	:					8.63	2.08	1.54
Total	:					19.07	7.10	3.48

PEANUTS: RESOURCES USED IN PRODUCTION, AREA VII-G2, 1949

The data presented here are based on a survey in 1950 of 30 farms producing peanuts in central Oklahoma. These farms are located in type-of-farming area VII-G2, a cotton and wheat producing area in the Mixed Prairies and Cross Timbers section of Oklahoma.

The farms surveyed averaged 158 acres per farm. In 1949, 76 acres were in crops, including 14 acres in peanuts. The yield of peanuts averaged about 870 pounds per acre.

Tractors provided most of the power used in producing peanuts, although horses were used for some operations. The drawbar-horsepower rating of tractors on these farms ranged from 9 to 21; the most common was about 14.

Materials used and contract work hired, 1949

MATERIALS USED

Item	: Unit	: Quantity : per acre	: Price : per unit	: Cost : per acre	: Average : Acreage covered	: cost per acre
		: Number	Dollars	Dollars	Percent	Dollars
Seed	: Lb.	: 33	0.18	5.94	100	5.94
Mixed fertilizer	: Cwt.	: 1.75	2.05	3.59	49	1.76
Superphosphate fertilizer	: Cwt.	: 1.25	1.75	2.19	10	.22
Sacks	: No.	: 19	.12	2.28	100	2.28
Total materials	:	:				10.20

CONTRACT WORK HIRED

Threshing	: Bu.	: 29	.15	4.35	100	4.35
Hauling	: Bu.	: 29	.03	.87	7	.06
Total contract work	:	:				4.41

Man labor, power, and machinery used by operation in producing and harvesting peanuts, area VII-G2, central Oklahoma, 1949

Operation	: Size :	:Time per acre:			: Average time per			
	: of :	:Times:	once over	:Acreage:	acre - all farms			
	:equipment:	over :	Man	Power	:covered:	Man	Tractor:Horse	
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.	Hrs.
Plow, moldboard	:2-14 inch	1.0	1.43	1.36	78	1.12	1.06	---
Plow, moldboard, horses	:1-12 inch	1.0	4.48	9.42	15	.67	---	1.41
Plow, disk	: 2-disk	1.0	2.87	2.74	7	.20	.19	---
Disk, tandem	: 7-foot	1.4	.70	.67	74	.73	.70	---
Harrow, spiketooth	: 8-foot	1.0	.44	.40	43	.19	.17	---
Harrow, spiketooth, h.	: 7-foot	1.0	1.04	1.89	10	.10	---	.19
Harrow, springtooth	: 6-foot	2.0	.51	.46	14	.14	.13	---
Lay-off rows	: 2-row	1.0	.65	.62	45	.29	.28	---
Lay-off rows, horses	: 1-row	1.0	2.20	4.01	17	.37	---	.68
Plant	: 2-row	1.0	.87	.72	59	.51	.42	---
Plant	: 1-row	1.0	1.69	1.54	13	.22	.20	---
Plant, horses	: 1-row	1.0	2.30	4.20	28	.64	---	1.18
Fertilize	: 1-row	1.0	.92	.84	6	.06	.05	---
Harrow, spiketooth	: 8-foot	1.3	.51	.46	23	.15	.14	---
Cultivate	: 2-row	3.8	.68	.65	72	1.86	1.78	---
Cultivate	: 1-row	4.8	1.20	1.14	13	.75	.71	---
Cultivate, horses	: 1-row	4.3	1.97	3.59	15	1.27	---	2.32
Hoe by hand	: ---	1.4	6.14	---	80	6.88	---	---
Total preharvest	:					16.15	5.83	5.78
Dig	: 2-row	1.0	.82	.79	59	.48	.47	---
Dig	: 1-row	1.0	1.00	.96	26	.26	.25	---
Dig, horses	: 1-row	1.0	2.43	4.43	15	.36	---	.66
Rake, side-delivery	: 7-foot	1.0	.59	.57	48	.28	.27	---
Shake and stack by hand	: ---	1.0	10.92	---	52	5.68	---	---
Haul stacks	: ---	1.0	4.25	.40	61	2.60	.24	---
Haul stacks, horses	: ---	1.0	9.38	1.74	39	3.66	---	.68
Thresh, contract	: ---	1.0	2.52	.77	100	2.52	.77	---
Haul to barn	: ---	1.0	.45	.22	46	.21	.10	---
Haul to barn, horses	: ---	1.0	2.11	4.70	34	.72	---	1.60
Haul to town, truck	: ---	1.0	.17	.14	13	.02	---	---
Haul to town, t.,contract:	: ---	1.0	.14	.14	7	.01	---	---
Total harvest	:					16.80	2.10	2.94
Total 1/	:					32.95	7.93	8.72

1/ In addition, truck use averaged 0.03 hour an acre.

RYE: RESOURCES USED IN PRODUCTION, AREA III-A3, 1950

Data presented here are based on a survey in 1951 of 19 farms producing rye. These farms are located in type-of-farming area III-A3 in north central North Dakota. The production of spring wheat and other small grains is the most important enterprise in this area.

The farms surveyed averaged 912 acres. Cropland comprised about 677 acres. In 1950, 83 acres were in rye, and the yield averaged 18 bushels per harvested acre.

Tractors and motorized equipment provided all the power used in producing rye. The drawbar-horsepower rating of tractors ranged from 13 to 37; the most common was about 26.

Materials used and contract work hired, 1950 1/

MATERIALS USED

Item	: Unit	: Quantity: per	Price : per	Cost : per	: Average	
		: acre	: unit	: acre	: Acreage:	cost
		: <u>Number</u>	<u>Dollars</u>	<u>Dollars</u>	<u>Percent</u>	<u>Dollars</u>
Seed <u>2/</u>	: Bu.	: 1.2	1.20	1.44	100	<u>1.44</u>
Total materials	:	:				<u>1.44</u>

1/ No contract work was reported on farms surveyed in this area.

2/ Approximately 28 percent of the farmers in this area purchased rye seed.

Man labor, power, and machinery used by operation in producing and harvesting rye, area III-A3, north central North Dakota, 1950

Operation	: Size :	:Time per acre:			:Average time per		
	: of :	:Times:	once over	:Acreage:	acre - all farms		
	:equipment:	over :	Man	Power	covered:	Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Plow, moldboard	:4-14 inch	1.0	0.56	0.54	58	0.32	0.31
Plow, one-way	: 9-foot	1.0	.28	.26	14	.04	.04
Disk, tandem	:10-foot	2.0	.30	.28	41	.25	.23
Harrow, spiketooth	:28-foot	1.3	.08	.07	62	.06	.06
Quackdig	:14-foot	1.0	.20	.19	14	.03	.03
Field, cultivate	:12-foot	1.0	.21	.20	16	.03	.03
Plow, pack & pony drill	:4-14 inch	1.0	.36	.35	5	.02	.02
Disk and drill	:10-foot	1.0	.32	.29	15	.05	.04
Seed, drill	:12-foot	1.0	.24	.22	80	.19	.18
Harrow, spiketooth	:28-foot	1.0	.09	.08	25	.02	.02
Total preharvest	:					1.01	.96
Swath	:12-foot	1.0	.20	.19	100	.20	.19
Combine	:10-foot	1.0	.56	.44	100	.56	.44
Haul grain, truck	: ---	1.0	.41	.25	100	.41	---
Total harvest	:					1.17	.63
Total <u>1/</u>	:					2.18	1.59

1/ In addition, truck use averaged 0.25 hour an acre.

RYE: RESOURCES USED IN PRODUCTION, AREA III-C2, 1950

The data presented here are based on a survey made in 1951 of 16 farms producing rye. These farms are located in type-of-farming area III-C2, a wheat and range-livestock area in northeastern Montana and southwestern North Dakota.

The farms surveyed averaged 2,991 acres per farm. Cropland comprised about 547 acres. In 1950, 38 acres were in rye, and the yield averaged about 17 bushels per acre.

Tractors provided most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 14 to 34; the most common was about 22.

Materials used and contract work hired, 1950

MATERIALS USED

Item	: Unit	: Quantity: per acre	: Price : per unit	: Cost : per acre	: Average : Acreage: covered	: cost per acre
		: Number	Dollars	Dollars	Percent	Dollars
Home-grown seed	: Bu.	: 1.1	1.25	1.38	94	1.30
Purchased seed	: Bu.	: 1.1	1.40	1.54	6	.09
Twine	: Lb.	: 1.4	.27	.38	7	.03
Total materials						1.42

CONTRACT WORK HIRED

Combining	: Acre	: 1.0	3.00	3.00	3	.09
Total contract work						.09

Man labor, power, and machinery used by operation in producing and
harvesting rye, area III-C2, northeastern Montana and
southwestern North Dakota, 1950

Operation	Size	Time per acre:			Average time per		
	of	Times	once over	Acreage	acre - all farms		
	equipment	over	Man	Power	covered	Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Plow, one-way	: 8-foot	1.0	0.32	0.30	51	0.16	0.15
Plow, moldboard	: 3-14 inch	1.0	.76	.72	39	.30	.28
Disk, tandem	: 9-foot	1.0	.26	.25	26	.07	.06
Harrow, spiketooth	: 20-foot	2.0	.26	.25	24	.12	.12
Drill	: 10-foot	1.0	.32	.29	50	.16	.14
Plow, pack & pony drill	: 4-foot	1.0	.52	.47	39	.20	.18
Disk and drill	: 10-foot	1.0	.38	.35	11	.04	.04
Total preharvest	:					1.05	.97
Windrow	: 12-foot	1.0	.24	.23	69	.17	.16
Combine	: 9-foot	1.0	.36	.33	90	.32	.30
Combine, contract	: 6-foot	1.0	.48	.44	3	.01	.01
Haul grain, truck	: -	1.0	.30	.16	93	.28	---
Bind	: 7-foot	1.0	.81	.73	7	.06	.05
Shock by hand	: -	1.0	.97	---	7	.07	---
Haul bundles	: -	1.0	1.81	1.24	7	.13	.09
Thresh	: 26-inch	1.0	.56	.49	7	.04	.03
Haul from field, truck	: -	1.0	.36	.25	7	.03	---
Total harvest	:					1.11	.64
Total <u>1/</u>	:					2.16	1.61

1/ In addition, truck use averaged 0.17 hour an acre.

RYE: RESOURCES USED IN PRODUCTION, AREA III-E2, 1950

The data presented here are based on a survey of approximately 30 farms in 1951, in eastern North Dakota and western Minnesota. These farms are in type-of-farming area III-E2, a spring wheat, small grain, livestock, potato, and sugar beet area in the Red River Valley.

The farms surveyed averaged 490 total acres. In 1950, 370 acres were in crops, including 38 in rye. The average yield of rye was approximately 18 bushels per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 9 to 32; the most common was about 21.

Materials used and contract work hired, 1950

MATERIALS USED

Item	: Unit	: Quantity per acre	: Price per unit	: Cost per acre	: Average Acreage covered	: cost per acre
		: Number	: Dollars	: Dollars	: Percent	: Dollars
Home-grown seed	: Bu.	: 1.4	1.30	1.82	54	0.98
Purchased seed	: Bu.	: 1.4	2.75	3.85	46	1.77
Phosphate fertilizer	: Cwt.	: 1.50	3.55	5.33	8	.43
Twine	: Lb.	: 2.8	.24	.67	7	.05
Total materials	:	:				3.23

CONTRACT WORK HIRED

Combining, self-propelled:	: Acre	: 1.0	3.10	3.10	6	.19
Combining	: Acre	: 1.0	3.10	3.10	3	.09
Total contract work	:	:				.28

Man labor, power, and machinery used by operation in producing and
harvesting rye, area III-E2, eastern North Dakota
western Minnesota, 1950

Operation	: Size :	:Time per acre:			:Average time per		
	: of :	:Times:	once over		:Acreage:	acre - all farms	
	:equipment:	:over:	Man	Power	:covered:	Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Fertilize, spreader	:16-foot	1.0	0.38	0.36	8	0.03	0.03
Plow, moldboard	:3-14 inch	1.0	.78	.75	76	.59	.57
Plow, duckfoot	:12-foot	3.5	.39	.37	9	.12	.12
Field cultivate	:12-foot	3.1	.26	.25	69	.56	.54
Disk, single	:19-foot	2.1	.14	.14	48	.14	.14
Disk, tandem	:10-foot	1.3	.29	.27	8	.03	.03
Harrow, springtooth	:24-foot	1.3	.10	.09	12	.02	.01
Harrow, spiketooth	:25-foot	1.3	.11	.11	95	.13	.13
Seed, drill	:14-foot	1.0	.23	.21	100	.23	.21
Harrow, spiketooth	:26-foot	1.0	.11	.11	53	.06	.06
Total preharvest	:					1.91	1.84
Swath	:12-foot	1.0	.24	.23	93	.22	.21
Combine	: 9-foot	1.0	.67	.52	54	.36	.28
Combine, self-propelled	:12-foot	1.0	.35	.32	30	.10	---
Combine, contract	: 9-foot	1.0	.70	.64	3	.02	.02
Combine, s.p., contract	:12-foot	1.0	.26	.24	6	.02	---
Haul from combine	: ---	1.0	.75	.39	10	.08	.04
Haul from combine, t.	: ---	1.0	.51	.29	83	.42	---
Bind	: 8-foot	1.0	.97	.59	7	.07	.04
Shock by hand	: ---	1.0	.75	---	7	.05	---
Haul bundles	: ---	1.0	.43	.16	7	.03	.01
Thresh	: ---	1.0	.78	.15	7	.05	.01
Total harvest	:					1.42	.61
Total 1/	:					3.33	2.45

1/ In addition, truck use averaged 0.24 hour an acre, and self-propelled combine 0.11 hour an acre.

RYE: RESOURCES USED IN PRODUCTION, AREA III-E3, 1949

The data presented here are based on a 1950 survey of 30 farms that produced rye in 1949. These farms are located in southeastern North Dakota and east-north central South Dakota. This is a transition area between the Corn Belt and the Northern Plains wheat area. Wheat, flax, corn, hay and other feed crops, and livestock are important products of these farms.

The farms surveyed averaged 477 total acres of which 434 acres were in crops in 1949. Planted acreage of rye averaged 45 acres per farm, and harvested acreage averaged 44 acres including about 1.5 acres of volunteer rye. The average yield of rye was 14.5 bushels per harvested acre.

Tractors and motorized equipment provided nearly all of the power used in the production of rye. Horses were used to haul bundles on a few of the farms where rye was threshed. The drawbar-horsepower rating of tractors used on these farms ranged from 10 to 27; the most common was about 19.

Materials used and contract work hired, 1949

MATERIALS USED

Item	: Unit	: Quantity : : per : : acre	Price : : per : : unit	Cost : : per : : acre	: Average : Acreage : : covered : : per acre	: cost : per acre
		: Number	Dollars	Dollars	Percent	Dollars
Home-grown seed	: Bu.	: 1.4	<u>1/</u> 1.20	1.68	100	1.68
Ceresan	: Bu.	: 1.4	.03	.04	19	.01
Mixed fertilizer	: Lb.	: .60	2.80	1.68	10	.17
Spray (2,4-D)	: Pt.	: .9	.70	.63	17	.11
Twine	: Lb.	: 2.5	.23	.58	5	.03
Total materials	:	:				<u>2.00</u>

CONTRACT WORK HIRED

Combining	: Acre	: 1.0	3.00	3.00	6	.18
Total contract work	:	:				<u>.18</u>

1/ Two-State average price received by farmers, September 1948.

Man labor, power, and machinery used by operation in producing and harvesting rye, area III-E3, southeastern North Dakota and east-north central South Dakota, 1949

Operation	Size	Time per acre:			Average time per		
	of	Times:	once over	Acreage:	acre - all farms		
	equipment:	over	Man	Power	covered:	Man	Tractor
	No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.	
Plow, moldboard	:2-14 inch	1.0	1.10	1.05	33	0.36	0.35
Plow, moldboard	:3-14 inch	1.0	.77	.74	51	.39	.38
Disk, single	:12-foot	1.4	.32	.31	25	.11	.11
Disk, tandem	:10-foot	1.2	.33	.32	17	.07	.07
Field cultivate	: 9-foot	3.3	.36	.34	21	.25	.24
Harrow, spiketooth	:24-foot	1.6	.14	.13	73	.16	.15
Haul seed	: ---	1.0	.02	.02	25	.01	.01
Clean and treat seed	: ---	1.0	.05	---	19	.01	---
Seed, drill	:11-foot	1.0	.32	.30	96	.31	.29
Seed, endgate	: ---	1.0	.17	.15	4	.01	.01
Harrow, spiketooth	:24-foot	1.2	.14	.13	53	.09	.08
Spray	: ---	1.0	.15	.14	17	.03	.02
Total preharvest	:					1.80	1.71
Windrow	:12-foot	1.0	.26	.24	95	.25	.23
Combine	: 6-foot	1.0	.50	.46	51	.26	.23
Combine	:12-foot	1.0	.35	.32	7	.02	.02
Combine, s.p.	:12-foot	1.0	.28	.25	31	.09	---
Combine, s.p., c.	:12-foot	1.0	.28	.25	6	.02	---
Haul from combine, t.	: ---	1.0	.47	.29	95	.45	---
Bind	: 8-foot	1.0	1.09	.51	5	.05	.03
Shock by hand	: ---	1.0	.78	---	5	.04	---
Haul bundles, horses	: ---	1.0	1.21	1.11	5	.06	---
Thresh	:26-inch	1.0	.25	.23	5	.01	.01
Haul grain, truck	: ---	1.0	.21	.10	5	.01	---
Elevate grain	: ---	1.0	.21	.10	5	.01	.01
Total harvest	:					1.27	.53
Total 1/	:					3.07	2.24

1/ In addition, self-propelled combines averaged 0.09 hour an acre, horse work 0.06 hour an acre, and truck use 0.29 hour an acre.

SOYBEANS: RESOURCES USED IN PRODUCTION, AREA V-A1, 1949

Man labor, power, and machinery used by operation in producing and harvesting soybeans, area V-A1, western Iowa, eastern Nebraska, southeastern South Dakota and northeastern Kansas, 1949

Operation	Size	Time per acre:			Average time per		
	of	Times:	once over		Acreage:	acre - all farms	
	equipment:	over	Man	Power	covered:	Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Load manure, loader	: ---	1.0	3.30	2.88	3	0.10	0.09
Apply manure, spreader	: 60 bu.	1.0	4.32	2.53	6	.26	.15
Plow, moldboard	: 2-16 inch	1.0	1.08	1.03	77	.83	.79
Disk, single	: 15-foot	3.0	.22	.21	67	.44	.42
Disk, tandem	: 9-foot	2.3	.36	.34	32	.27	.25
Harrow, springtooth	: 10-foot	1.3	.33	.32	29	.12	.12
Harrow, spiketooth	: 20-foot	2.4	.13	.12	96	.30	.28
Treat seed	: ---	1.0	.05	---	17	.01	---
Surface plant	: 4-row	1.0	.35	.32	38	.13	.12
Surface plant, horses	: 2-row	1.0	.77	1.47	5	.04	---
List and plant	: 2-row	1.0	.63	.50	22	.14	.11
Surface plant	: 2-row	1.0	.58	.50	19	.11	.09
Drill	: 10-foot	1.0	.43	.41	16	.07	.07
Cultivate, first rate	: 2-row	2.0	.55	.53	56	.62	.59
Cultivate, first rate	: 4-row	2.0	.26	.25	29	.15	.15
Cultivate, other rate	: 2-row	1.2	.39	.37	29	.14	.13
Cultivate, other rate	: 4-row	1.2	.18	.18	4	.01	.01
Rotary hoe	: 14-foot	1.0	.16	.15	22	.04	.03
Hoe by hand	: ---	1.0	1.52	---	42	.64	---
Total preharvest	:					4.42	3.40
Combine, power take-off:	5-foot	1.0	.95	.91	24	.23	.22
Combine	: 6-foot	1.0	.77	.74	55	.42	.41
Combine, self-propelled:	12-foot	1.0	.48	.46	6	.03	---
Combine, contract	: 6-foot	1.0	.77	.74	15	.12	.11
Haul from combine	: ---	1.0	.32	.32	100	.32	.32
Total harvest	:					1.12	1.06
Total <u>1/</u>	:					5.54	4.46

1/ In addition, horse work averaged 0.07 hour an acre, and self-propelled combines 0.03 hour an acre.

SOYBEANS: RESOURCES USED IN PRODUCTION, AREA V-F⁴, 1949

The data presented here are based on a survey made in 1950 of approximately 31 farms producing soybeans in 1949 in northeastern South Dakota and west central Minnesota. These farms are located in type-of-farming area V-F⁴, a livestock and cash-grain area in the northwestern Corn Belt fringe.

The farms surveyed averaged 252 total acres per farm. In 1949, 204 acres were in crops, including 28 in soybeans. The average yield of soybeans was approximately 16 bushels per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of the tractors ranged from 15 to 27; the most common was about 20.

Materials used and contract work hired, 1949

MATERIALS USED

Item	: Unit	: per acre	: Quantity: per unit	: Price per unit	: Cost per acre	: Average Acreage: covered	: cost per acre
			: Number	: Dollars	: Dollars	: Percent	: Dollars
Seed ¹ /	: Bu.	: 1.2	: 1.2	: 2.90	: 3.48	: 100	: 3.48
Inoculant	: Bu.	: 1.2	: 1.2	: .10	: .12	: 75	: .09
Manure	: Ton	: 6	: 2/2.00	: 12.00	: 8	: .96	
Mixed fertilizer	: Cwt.	: 1.85	: 2.10	: 3.88	: 10	: .39	
Total materials	:	:	:	:	:	:	: 4.92

CONTRACT WORK HIRED

Combining	: Acre	: 1.0	: 3.75	: 3.75	: 32	: 1.20
Total contract work	:	:	:	:	:	: 1.20

¹/ Approximately 17 percent of the farmers in this area purchased soybean seed.

²/ Estimated.

Man labor, power, and machinery used by operation in producing and
harvesting soybeans, area V-F⁴, northeastern South Dakota
and west central Minnesota, 1949

Operation	Size of equipment	Time per acre:			Average time per		
		Times over	once over		Acreage covered	acre - all farms	
			Man	Power		Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Apply manure, spreader	: ---	1.0	3.05	2.08	8	0.24	0.17
Plow, moldboard	: 2-16 inch	1.0	1.12	1.07	79	.88	.85
Plow, moldboard	: 3-14 inch	1.0	.87	.83	21	.18	.17
Disk, tandem	: 8-foot	1.3	.61	.58	12	.10	.09
Disk, single	: 15-foot	2.0	.33	.32	65	.43	.42
Harrow, springtooth	: 9-foot	2.0	.55	.53	48	.53	.51
Harrow, spiketooth	: 22-foot	2.2	.14	.13	90	.28	.26
Inoculate seed	: ---	1.0	.06	---	75	.04	---
Plant	: 2-row	1.0	.61	.58	75	.46	.44
Plant	: 4-row	1.0	.32	.31	19	.06	.06
Plant, horses	: 2-row	1.0	.77	1.47	6	.05	---
Cultivate, first	: 2-row	2.6	.58	.55	100	1.51	1.43
Cultivate, other	: 2-row	1.4	.44	.42	38	.23	.22
Weed by hand	: ---	1.0	.66	---	29	.19	---
Total preharvest	:					5.18	4.62
Combine	: 6-foot	1.0	.96	.88	55	.53	.48
Combine	: 10-foot	1.0	.76	.69	4	.03	.03
Combine, self-propelled	: 12-foot	1.0	.50	.46	9	.04	---
Combine, contract	: 6-foot	1.0	.96	.88	32	.31	.28
Haul from combine	: ---	1.0	.24	.18	100	.24	.18
Total harvest	:					1.15	.97
Total 1/	:					6.33	5.59

1/ In addition, horse work averaged 0.09 hour an acre, and self-propelled combine 0.04 hour an acre.

SOYBEANS: RESOURCES USED IN PRODUCTION, AREA V-G1, 1949

The data presented here are based on a survey of approximately 39 farms growing soybeans in 1950, in western Missouri and eastern Kansas. These farms are located in type-of-farming area V-G1, a livestock, cash-grain, and dairy area.

The farms surveyed averaged 360 total acres. In 1949, 222 acres were in crops, including 33 in soybeans. The average yield of soybeans was 19 bushels per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 13 to 26; the most common was 20.

Materials used and contract work hired, 1949

MATERIALS USED

Item	: Unit	: Quantity : per acre	: Price : per unit	: Cost : per acre	: Average : Acreage : covered	: cost : per acre
		: Number	Dollars	Dollars	Percent	Dollars
Seed ^{1/}	: Bu.	: 0.9	3.50	3.15	100	3.15
Inoculant	: Bu.	: .9	.11	.10	59	.06
Manure	: Ton	: 3	^{2/} 2.00	6.00	4	.24
Mixed fertilizer	: Cwt.	: 1.30	1.85	2.40	39	.94
Nitrate fertilizer	: Cwt.	: 1.00	3.75	3.75	1	.04
Phosphate fertilizer	: Cwt.	: .75	3.60	2.70	2	.05
Total materials						<u>4.48</u>

CONTRACT WORK HIRED

Combining	: Acre	: 1.0	3.80	3.80	18	<u>.68</u>
Total contract work						<u>.68</u>

^{1/} Approximately 28 percent of the farmers in this area purchase soybean seed.

^{2/} Estimated.

Man labor, power, and machinery used by operation in producing and
harvesting soybeans, area V-G1, western Missouri and eastern
Kansas, 1949

Operation	: Size : of : equipment:	:Time per acre:			:Average time per		
		:Times: :over:	:once over		:Acreage: :covered:	:acre - all farms	
			Man	Power		Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Apply manure, spreader	:60-bu.	1.0	3.01	1.00	4	0.12	0.04
Plow, moldboard	:2-14 inch	1.0	1.12	1.07	97	1.09	1.04
Disk, tandem	: 7-foot	2.1	.42	.42	80	.71	.71
Disk, single	:14-foot	2.6	.32	.32	18	.15	.15
Harrow, spiketooth	:15-foot	1.4	.32	.31	63	.28	.27
Inoculate	: ---	1.0	.53	---	<u>1/</u> 7	.04	---
Plant	: 2-row	1.0	.79	.73	89	.70	.65
Plant, horses	: 2-row	1.0	1.18	2.16	11	.13	---
Harrow, spiketooth	:12-foot	1.0	.30	.29	23	.07	.07
Cultivate, first	: 2-row	1.0	.72	.69	89	.64	.61
Cultivate, other	: 2-row	1.5	.55	.55	85	.70	.70
Total preharvest	:					4.63	4.24
Combine	: 5-foot	1.0	.95	.84	73	.69	.61
Combine, self-propelled	:10-foot	1.0	.60	.60	9	.05	---
Combine, contract	: 6-foot	1.0	.74	.66	18	.13	.12
Haul from combine, t.	:1 $\frac{1}{2}$ -ton	1.0	.86	.86	100	.86	---
Total harvest	:					1.73	.73
Total <u>2/</u>	:					6.36	4.97

1/ Most of the inoculating of seed is included in planting operations.

2/ In addition, horse work averaged 0.24 hour an acre, truck use averaged 0.86 hour an acre, and self-propelled combine 0.05 hour an acre.

SOYBEANS: RESOURCES USED IN PRODUCTION, AREA VI-E2, 1949

The data presented here are based on a survey in 1950 of 29 farms that produced soybeans. These farms are located in type-of-farming area VI-E2, a general farming area in southeastern Kansas and northeastern Oklahoma.

The farms surveyed averaged 244 total acres. In 1949, 154 acres were in crops, including 29 acres in soybeans. The yield of soybeans averaged about 14 bushels per acre.

Tractors and motorized equipment provide all of the power used in producing soybeans. The drawbar-horsepower rating of these tractors ranged from 11 to 26; the most common was about 18.

Materials used and contract work hired, 1949

MATERIALS USED

Item	:	Unit	:	Quantity	:	Price	:	Cost	:	Average
	:		:	per	:	per	:	per	:	cost
	:		:	acre	:	unit	:	acre	:	covered:per acre
	:		:	Number	:	Dollars	:	Dollars	:	Percent Dollars
Seed <u>1</u> /	:	Bu.	:	0.6	:	3.45	:	2.07	:	100 2.07
Inoculant	:	Acre	:	1.0	:	.08	:	.08	:	82 .07
Total materials	:		:		:		:		:	2.14

CONTRACT WORK HIRED

Combining	:	Acre	:	1.0	:	3.27	:	3.27	:	20 0.65
Total contract work	:		:		:		:		:	.65

1/ Approximately 52 percent of the farmers in this area purchased soybean seed.

Man labor, power, and machinery used by operation in producing and
harvesting soybeans, area VI-E2, southeastern Kansas and
northeastern Oklahoma, 1949

Operation	Size of equipment	Times over	Time per acre:			Average time per acre - all farms	
			Man	Power	covered	Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Plow, moldboard	: 2-14 inch	1.0	1.43	1.36	99	1.42	1.35
Disk, tandem	: 7-foot	1.4	.45	.43	100	.63	.60
Harrow, spiketooth	: 12-foot	1.2	.34	.31	93	.38	.34
Plant	: 2-row	1.0	.51	.48	50	.26	.24
Seed, drill	: 8-foot	1.0	.35	.33	50	.18	.16
Cultivate, first	: 2-row	1.0	.53	.51	98	.52	.50
Cultivate, other	: 2-row	2.1	.53	.51	87	.97	.93
Total preharvest	:					4.36	4.12
Combine	: 7-foot	1.0	.65	.58	80	.52	.46
Combine, contract	: 7-foot	1.0	.65	.62	20	.13	.12
Haul from combine, t.	: 1½-ton	1.0	.58	.58	100	.58	---
Total harvest	:					1.23	.58
Total 1/	:					5.59	4.70

1/ In addition, truck use averaged 0.58 hour an acre.

SUGAR BEETS (IRRIGATED): RESOURCES USED IN PRODUCTION, AREA IX-F2, 1951

The data presented here are based on a survey made in 1951 of approximately 50 farms producing sugar beets under irrigation in 1951 in southeastern Wyoming and west central Nebraska. These farms are located in type-of-farming area IX-F2, a specialized crop and general farming area along the North Platte and Laramie Rivers. The particular farms surveyed are diversified, producing livestock, hay, corn, small grains, and specialized crops.

The farms averaged about 200 acres per farm. Cropland comprised about 143 acres. In 1951, approximately 31 acres were in sugar beets, and the yield was about 15 tons per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of the tractors ranged from 12 to 27; the most common was about 16.

Materials used and contract work hired, 1951

MATERIALS USED

Item	: Unit	: Quantity per acre	: Price per unit	: Cost per acre	: Average Acreage covered	: Average cost per acre
		: Number	: Dollars	: Dollars	: Percent	: Dollars
Seed	: Lb.	: 6	0.45	2.70	100	2.70
Manure	: Ton	: 11	1/2.00	22.00	59	12.98
Mixed fertilizer (12-24-0)	: Cwt.	: 1.25	4.15	5.19	10	.52
Nitrate fertilizer (33-0-0)	: Cwt.	: 1.00	4.25	4.25	13	.55
Phosphate fertilizer (0-42-0)	: Cwt.	: 1.25	3.75	4.69	97	4.55
Water	: Acre	: 1.0	2.05	2.05	100	2.05
Total materials						23.35

CONTRACT WORK HIRED

Spraying	: Acre	: 1.0	3.40	3.40	21	.71
Thinning	: Acre	: 1.0	13.50	13.50	68	9.18
Hoeing	: Acre	: 1.0	5.50	5.50	68	3.74
Weeding	: Acre	: 2/1.1	4.00	4.40	20	.88
Topping, hand	: Ton	: 15	1.45	21.75	22	4.78
Hauling	: Ton	: 15	1.30	19.50	4	.78
Total contract work						20.07

1/ Estimated.

2/ One acre times average number of times over.

Man labor, power, and machinery used by operation in producing and harvesting
sugar beets, irrigated, area IX-F2, southeastern Wyoming
and west central Nebraska, 1951

Operation	Size	Time per acre			Average time per		
	of	Times	once over	Acreage	acre - all farms		
	equipment	over	Man	Power	covered	Man : Tractor	
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Apply manure, loader-sp.	75-bu.	1.0	4.56	4.56	59	2.69	2.69
Fertilize, spreader	10-foot	1.0	.72	.44	45	.32	.20
Plow, moldboard	2-16 inch	1.0	1.26	1.21	54	.68	.65
Plow, moldboard	2-14 inch	1.0	1.50	1.43	33	.50	.47
Plow, moldboard	1-16 inch	1.0	2.42	2.31	13	.31	.30
Disk, tandem	8-foot	1.6	.52	.47	86	.72	.64
Harrow, spiketooth	15-foot	2.0	.32	.29	100	.64	.58
Level	10-foot	1.7	.47	.45	98	.78	.75
Cultipack	10-foot	1.0	.32	.29	18	.06	.05
Plant	4-row	1.0	.72	.66	36	.26	.24
Plant and fertilize	4-row	1.0	.78	.72	32	.25	.23
Plant	6-row	1.0	.49	.45	15	.07	.07
Plant and fertilize	6-row	1.0	.55	.51	17	.09	.09
Weed, rotary hoe	11-foot	1.0	.44	.40	33	.15	.13
Cultivate, first	4-row	1.0	.97	.88	68	.66	.60
Cultivate, other	4-row	2.8	.82	.75	68	1.56	1.43
Cultivate, first	6-row	1.0	.67	.61	32	.21	.20
Cultivate, other	6-row	2.8	.53	.48	32	.47	.43
Block	4-row	1.0	.52	.47	12	.06	.06
Thin by hand	---	1.0	16.04	---	32	5.13	---
Thin by hand, contract	---	1.0	16.04	---	68	10.91	---
Hoe by hand	---	1.0	7.35	---	32	2.35	---
Hoe by hand, contract	---	1.0	7.35	---	68	5.00	---
Spray, contract	12-row	1.0	.36	.27	21	.08	.06
Ditch	---	1.2	.47	.29	89	.50	.31
Ditch by hand	---	1.0	.47	---	15	.07	---
Irrigate, first	---	1.0	3.40	---	100	3.40	---
Irrigate, other	---	4.6	3.15	---	100	14.49	---
Weed by hand	---	1.1	4.67	---	24	1.23	---
Weed by hand, contract	---	1.1	4.67	---	20	1.03	---
Total preharvest	:	:	:	:	:	54.67	10.18
Dig, pull or lift	2-row	1.0	2.16	2.07	30	.65	.62
Top by hand	---	1.0	17.32	---	8	1.39	---
Top by hand, contract	---	1.0	17.32	---	22	3.81	---
Pull and top	1-row	1.0	4.02	3.41	29	1.17	.99
Pull, top and load	1-row	1.0	4.48	3.70	41	1.84	1.52
Load by machine	---	1.0	2.24	2.15	59	1.32	1.27
Haul, truck	1½-ton	1.0	5.88	5.15	96	5.64	---
Haul, truck, contract	1½-ton	1.0	5.88	5.15	4	.24	---
Total harvest	:	:	:	:	:	16.06	4.40
Total 1/	:	:	:	:	:	70.73	14.55

1/ In addition, truck use averaged 5.15 hours an acre.

WHEAT, SPRING (CONTINUOUS CROPPING): RESOURCES USED IN PRODUCTION,
AREA II-B1, 1950

The data presented here are based on a survey in 1951 of 42 farms that produced wheat on land that had been in crops the previous year. These farms are located in type-of-farming area II-B1. This is primarily a livestock area in western South Dakota, but some crops are also produced.

The farms surveyed averaged 1,324 total acres. In 1950 an average of 553 acres were in crops, including 251 acres in spring wheat. The yield of spring wheat averaged about 9 bushels per acre.

Tractors and motorized equipment provide all of the power used in producing spring wheat on these farms. The drawbar-horsepower rating of tractors on these farms ranged from 11 to 36; the most common was about 23.

Materials used and contract work hired, 1950

MATERIALS USED

Item	: Unit	: Quantity:	Price	: Cost	: Average	
		: per	: per	: per	: Acreage:	cost
		: acre	: unit	: acre	: covered:	per acre
		: Number	Dollars	Dollars	Percent	Dollars
Seed <u>1</u> /	: Bu.	: 1.2	2.30	2.76	100	2.76
Total materials	:	:				2.76

CONTRACT WORK HIRED

Combining	: Acre	: 1.0	4.00	4.00	7	.28
Combining, s.p.	: Acre	: 1.0	3.30	3.32	5	.17
Total contract work	:	:				.45
	:	:				

1/ Approximately 10 percent of the farmers in this area purchased seed wheat.

Man labor, power, and machinery used by operation in producing and
harvesting spring wheat, continuous cropping, area II-B1,
western South Dakota, 1950

Operation	: Size	: Time per acre:	: Average time per				
	: of	: Times:	: once over		: Acreage:	: acre - all farms	
	: equipment:	: over	: Man	: Power	: covered:	: Man	: Tractor
		<u>No.</u>	<u>Hrs.</u>	<u>Hrs.</u>	<u>Pct.</u>	<u>Hrs.</u>	<u>Hrs.</u>
Plow, moldboard	: 3-14 inch	1.0	0.56	0.54	45	0.25	0.24
Plow, one-way	: 8-foot	1.1	.33	.32	29	.10	.10
Disk, single	: 15-foot	1.5	.20	.19	33	.10	.09
Harrow, spiketooth	: 26-foot	1.2	.09	.08	68	.07	.07
Field cultivate	: 7-foot	1.2	.29	.27	9	.03	.03
Seed, drill	: 12-foot	1.0	.16	.15	100	.16	.15
Total preharvest	:					.71	.68
Swath	: 15-foot	1.0	.22	.19	42	.09	.08
Combine	: 12-foot	1.0	.41	.34	63	.26	.21
Combine, s.p.	: 12-foot	1.0	.32	.30	25	.08	---
Combine, contract	: 12-foot	1.0	.31	.29	7	.02	.02
Combine, s.p., contract	: 12-foot	1.0	.31	.29	5	.02	---
Haul grain, truck	: ---	1.0	.28	.15	100	.28	---
Total harvest	:					.75	.31
Total 1/	:					1.46	.99

1/ In addition, truck use averaged 0.15 hour an acre and self-propelled combines 0.09 hour an acre.

WHEAT, SPRING (CONTINUOUS CROPPING): RESOURCES USED IN PRODUCTION,
AREA III-A2, 1950

Data presented here are based on a survey in 1951 of 20 farms that produced wheat on land that had been in crops the previous year. These farms are located in type-of-farming area III-A2 in central North Dakota and north central South Dakota. This is a specialized wheat area although other small grains, flax, and livestock also are produced.

The farms surveyed averaged 520 acres. In 1950, an average of 366 acres were in crops, including 85 acres in spring wheat. The yield of spring wheat averaged about 10 bushels per harvested acre.

Tractors and motorized equipment provided most of the power used on these farms. Horses were used for hauling bundles on farms where wheat was threshed. The drawbar-horsepower rating of tractors on these farms ranged from 14 to 34; the most common was about 23.

Materials used and contract work hired, 1950

MATERIALS USED

Item	: Unit	: Quantity per acre	: Price per unit	: Cost per acre	: Average Acreage covered	: Average cost per acre
		: Number	: Dollars	: Dollars	: Percent	: Dollars
Home-grown seed	: Bu.	: 1.4	2.25	3.15	100	3.15
Twine	: Lb.	: 3.2	.24	.77	31	.24
Total materials	:	:				3.39

CONTRACT WORK HIRED

Swathing	: Acre	: 1.0	1.00	1.00	4	.04
Combining	: Acre	: 1.0	3.00	3.00	4	.12
Hauling grain	: Bu.	: 10	.03	.30	12	.04
Total contract work	:	:				.20

Man labor, power, and machinery used by operation in producing and
harvesting spring wheat, continuous cropping, area III-A2,
central North Dakota and north central
South Dakota, 1950

Operation	: Size	: Time per acre:	: Average time per				
	: of	: Times:	: once over		: Acreage:	: acre - all farms	
	: equipment:	: over	: Man	: Power	: covered:	: Man	: Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Plow, moldboard	: 3-14 inch	1.0	0.90	0.86	52	0.47	0.45
Disk, tandem	: 10-foot	1.3	.19	.18	27	.07	.06
Harrow, spiketooth	: 24-foot	2.1	.10	.09	74	.16	.14
Field cultivate	: 9-foot	2.0	.22	.21	9	.04	.04
Seed, drill	: 12-foot	1.0	.26	.24	71	.18	.17
Plow, pack & pony drill	: 5-foot	1.0	.53	.46	29	.15	.13
Total preharvest	:					1.07	.99
Swath	: 12-foot	1.0	.19	.18	65	.12	.12
Swath, contract	: 12-foot	1.0	.16	.16	4	.01	.01
Combine	: 10-foot	1.0	.48	.44	65	.31	.29
Combine, contract	: 12-foot	1.0	.30	.28	4	.01	.01
Haul from combine	: ---	1.0	.91	.62	3	.03	.02
Haul from combine, t.	: ---	1.0	.47	.32	66	.31	---
Bind	: 9-foot	1.0	.53	.40	31	.16	.12
Shock by hand	: ---	1.0	1.53	---	31	.47	---
Haul bundles, horses	: ---	1.0	3.83	5.57	31	1.19	---
Thresh	: 28-foot	1.0	.75	.66	31	.23	.20
Haul grain	: ---	1.0	.66	.45	19	.13	.09
Haul contract, truck	: ---	1.0	.66	.45	12	.08	---
Total harvest	:					3.05	.86
Total 1/	:					4.12	1.85

1/ In addition, horse work averaged 1.73 hours an acre and truck use 0.26 hour an acre.

WHEAT, SPRING (CONTINUOUS CROPPING): RESOURCES USED IN PRODUCTION,
AREA III-A3, 1947

The data presented here are based on a survey made in 1948 of 46 farms that produced wheat ranging in size from 340 to 700 acres. These farms are primarily crop farms located in central and northern North Dakota. Production of oats, barley, and flax is also important on these farms.

The farms surveyed averaged 507 total acres. In 1947, cropland averaged 411 acres. About 190 acres of wheat were harvested, of which 116 acres had been planted on land from which crops were harvested in 1946. The average yield of all wheat, including wheat on fallow, was 15 bushels per acre in 1947.

Tractors provided most of the power used in the production of wheat. Trucks were used to haul the wheat from combines and threshers, and horses were used to haul bundles on farms where wheat was threshed. The drawbar-horsepower rating of tractors used on these farms ranged from 10 to 32; the most common was about 21.

Materials used and contract work hired, 1947

MATERIALS USED

Item	:	Unit	:	Quantity:	Price	:	Cost	:	Average
	:		:	per	per	:	per	:	acreage:
	:		:	acre	unit	:	acre	:	covered:per acre
	:		:	Number	Dollars	:	Dollars	:	Percent Dollars
Home-grown seed	:	Bu.	:	1.4	2.35	:	3.29	:	67 2.20
Purchased seed	:	Bu.	:	1.4	2.80	:	3.92	:	33 1.29
Ceresan	:	Bu.	:	1.4	.04	:	.06	:	70 .04
Twine	:	Lb.	:	2.0	.23	:	.46	:	46 .21
Total materials	:		:			:		:	3.74

CONTRACT WORK HIRED

Combining	:	Acre	:	1.0	3.65	:	3.65	:	9 .33
Total contract work	:		:			:		:	.33

Man labor, power, and machinery used by operation in producing and
harvesting spring wheat, continuous cropping, area III-A3
central and northern North Dakota, 1947

Operation	Size	Time per acre:			Average time per		
	of	Times:	once over	Acreage:	acre - all farms		
	equipment:	over	Man	Power	covered:	Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Plow	: 3-14 inch	1.0	0.84	0.80	58	0.49	0.46
Plow and harrow	: 3-14 inch	1.0	.91	.87	13	.12	.11
Disk	: 9-foot	1.2	.37	.35	26	.11	.11
Field cultivate	: 26-foot	1.3	.25	.24	29	.09	.09
Harrow, spiketooth	: 26-foot	1.1	.14	.13	38	.06	.05
Drill	: 11-foot	1.0	.32	.31	69	.22	.21
Plow, pack & pony drill	: 42-inch	1.0	.91	.87	26	.24	.23
Drill and harrow	: 14-foot	1.0	.17	.16	5	.01	.01
Harrow, spiketooth	: 26-foot	1.0	.14	.13	51	.07	.07
Total preharvest	:					1.41	1.34
Windrow	: 12-foot	1.0	.33	.31	52	.17	.16
Combine	: 7-foot	1.0	.67	.56	25	.17	.14
Combine	: 12-foot	1.0	.54	.40	20	.11	.08
Combine, contract	: 12-foot	1.0	.54	.40	9	.05	.04
Haul from combine, t.	: ---	1.0	.35	.26	54	.19	---
Bind	: 8-foot	1.0	.67	.47	26	.17	.12
Bind	: 10-foot	1.0	.53	.37	20	.11	.07
Shock by hand	: ---	1.0	.75	---	37	.28	---
Haul bundles, horses	: ---	1.0	1.66	3.05	46	.76	---
Thresh	: 28-inch	1.0	.27	.25	46	.12	.12
Haul grain, truck	: ---	1.0	.42	.25	46	.19	---
Total harvest	:					2.32	.73
Total <u>1/</u>	:					3.73	2.07

1/ In addition, horse work averaged 1.40 hours an acre and truck use 0.26 hour an acre.

WHEAT, SPRING (CONTINUOUS CROPPING): RESOURCES USED IN PRODUCTION,
AREA III-C2, 1950

The data presented here are based on a survey made in 1951 of 22 farms producing spring wheat after wheat on a continuous cropping basis. These farms are located in type-of-farming area III-C2, a wheat and range-livestock area in northeastern Montana and southwestern North Dakota.

The farms surveyed averaged 1,071 acres per farm. Cropland comprised about 654 acres. In 1950, 188 acres were in spring wheat, and the yield averaged about 7 bushels per acre.

Tractors provided most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 10 to 41; the most common was about 24.

Materials used and contract work hired, 1950

MATERIALS USED

Item	: Unit	: Quantity: per acre	: Price per unit	: Cost per acre	: Average Acreage: covered	: Average cost per acre
		: Number	: Dollars	: Dollars	: Percent	: Dollars
Seed, home-grown	: Bu.	: 1.0	: <u>1</u> / 2.00	: 2.00	: 100	: <u>2.00</u>
Total materials	:	:				: <u>2.00</u>

CONTRACT WORK HIRED

Combining	: Acre	: 1.0	: 5.00	: 5.00	: 21	: <u>1.05</u>
Total contract work	:	:				: <u>1.05</u>
	:	:				

1/ Estimated.

Man labor, power, and machinery used by operation in producing and harvesting spring wheat, continuous cropping, area III-C2, northeastern Montana and southwestern North Dakota, 1950

Operation	: Size :	:Time per acre:			:Average time per		
	: of :	:Times:	once over		:Acreage:	acre - all farms	
	:equipment:	over :	Man	Power:	covered:	Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Plow, one-way	:10-foot	1.0	0.28	0.26	14	0.04	0.04
Plow and pack	:3-14 inch	1.0	.70	.67	28	.20	.19
Disk, tandem	:10-foot	2.4	.25	.24	8	.05	.05
Disk, single	:15-foot	1.3	.24	.23	19	.06	.06
Field, cultivate	: 8-foot	1.3	.32	.30	16	.07	.06
Harrow, spiketooth	:21-foot	2.0	.13	.13	10	.03	.03
Drill	:12-foot	1.0	.26	.24	29	.08	.07
Disk and drill	:10-foot	1.0	.31	.29	68	.21	.20
Plow, pack & pony drill	: 4-foot	1.0	.50	.44	3	.02	.01
Total preharvest	:					.76	.71
Windrow	:12-foot	1.0	.23	.22	26	.06	.06
Combine	:12-foot	1.0	.34	.32	79	.27	.25
Combine, contract	:12-foot	1.0	.30	.28	21	.06	.06
Haul grain, truck	: ---	1.0	.44	.32	100	.44	---
Total harvest	:					.83	.37
Total <u>1/</u>	:					1.59	1.08

1/ In addition, truck use averaged 0.32 hour an acre.

WHEAT, SPRING: RESOURCES USED IN PRODUCTION, AREA III-E3, 1949

The data presented here are based on a 1950 survey of 33 farms that produced wheat in 1949. These farms are located in southeastern North Dakota and east-north central South Dakota. This is a transition area between the Corn Belt and the Northern Plains wheat area. Wheat, flax, corn, hay and other feed crops, and livestock are important products of these farms.

The farms surveyed averaged 546 total acres of which 434 acres were in crops in 1949. The acreage in wheat averaged 151 acres per farm. All the planted acreage of wheat was harvested in 1949, and the average yield was 9 bushels per acre.

Tractors and motorized equipment provided nearly all the power used in the production of wheat. They were used for all operations except hauling bundles on a few farms where wheat was threshed. The drawbar-horsepower rating of tractors used on these farms ranged from 10 to 27; the most common was about 19.

Materials used and contract work hired, 1949

MATERIALS USED

Item	: Unit	: Quantity per acre	: Price per unit	: Cost per acre	: Average Acreage covered	: Average cost per acre
		: Number	Dollars	Dollars	Percent	Dollars
Home-grown seed	: Bu.	: 1.4	2.00	2.80	74	2.07
Purchased seed	: Bu.	: 1.4	2.45	3.43	26	.89
Mixed fertilizer	: Cwt.	: .60	2.60	1.56	2	.03
Spray	: Gal.	: .1	6.65	.66	6	.04
Twine	: Lb.	: 2.5	.22	.55	7	.04
Total materials	:	:				3.07

CONTRACT WORK HIRED

Combining	: Acre	: 1.0	2.50	2.50	4	.10
Combining, s.p.	: Acre	: 1.0	2.10	2.10	21	.44
Total contract work	:	:				.54

Man labor, power, and machinery used by operation in producing and harvesting spring wheat, area III-E3, southeastern North Dakota and east-north central South Dakota, 1949

Operation	Size	Time per acre:				Average time per	
	of	Times:	once over	Acreage:	acre - all farms		
	equipment:	over	Man	Power:	covered:	Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Plow, moldboard	:3-14 inch	1.0	0.74	0.70	100	0.74	0.70
Disk, single	:15-foot	1.3	.28	.26	38	.14	.13
Disk, tandem	:10-foot	1.0	.30	.29	5	.02	.01
Field cultivate	:10-foot	1.5	.32	.31	9	.04	.04
Harrow, spiketooth	:27-foot	1.4	.12	.11	75	.13	.12
Seed, drill	:11-foot	1.0	.28	.25	100	.28	.25
Harrow, spiketooth	:27-foot	1.0	.12	.11	71	.09	.08
Spray	: ---	1.0	.15	.14	6	.01	.01
Total preharvest	:					1.45	1.34
Windrow	:12-foot	1.0	.26	.24	50	.13	.12
Combine	: 6-foot	1.0	.59	.54	11	.06	.06
Combine	:12-foot	1.0	.34	.31	49	.17	.15
Combine, contract	:12-foot	1.0	.34	.31	4	.01	.01
Combine, s.p.	:12-foot	1.0	.37	.34	8	.03	---
Combine, s.p.,contract	:12-foot	1.0	.37	.34	21	.08	---
Haul from combine, t.:	---	1.0	.43	.25	93	.40	---
Elevate grain	: ---	1.0	.33	.16	40	.13	.06
Bind	:10-foot	1.0	.80	.46	7	.06	.03
Shock by hand	: ---	1.0	.76	---	7	.05	---
Haul bundles, sweep	: ---	1.0	.74	.35	4	.03	.01
Haul bundles, horses	: ---	1.0	1.77	2.93	3	.05	---
Thresh	:24-inch	1.0	.42	.32	7	.03	.02
Haul grain, truck	: ---	1.0	.44	.22	7	.03	---
Elevate grain	: ---	1.0	.29	.14	3	.01	.01
Total preharvest	:					1.27	.47
Total 1/	:					2.72	1.81

1/ In addition, self-propelled combines averaged 0.10 hour an acre, horse work 0.09 hour an acre, and truck use 0.25 hour an acre.

WHEAT, SPRING: RESOURCES USED IN PRODUCTION, AREA V-F1, 1950

Data presented here are based on a survey in 1951 of 29 farms producing spring wheat. These farms are located in type-of-farming area V-F1 in south central South Dakota. This is an area in which the production of livestock and the growing of cash grain crops are the most important enterprises.

The farms surveyed averaged 535 acres. In 1950, 342 acres were in crops, including 84 acres in spring wheat. The yield of spring wheat averaged about 9 bushels per acre.

Tractors and motorized equipment provided all of the power used in producing spring wheat. The drawbar-horsepower rating of tractors ranged from 9 to 32; the most common was about 22.

Materials used and contract work hired, 1950

MATERIALS USED

Item	Unit	Quantity: per acre	Price : per unit	Cost : per acre	Average Acreage: covered:	cost per acre
		Number	Dollars	Dollars	Percent	Dollars
Home-grown seed	Bu.	1.4	2.25	3.15	100	3.15
Twine	Lb.	2.0	.25	.50	10	.05
Total materials						3.20

CONTRACT WORK HIRED

Swathing	Acre	1.0	1.05	1.05	9	.09
Combining	Acre	1.0	2.80	2.80	18	.50
Hauling	Bu.	9.0	.05	.45	7	.03
Total contract work						.62

Man labor, power, and machinery used by operation in producing and
harvesting spring wheat, area V-Fl, south central
South Dakota, 1950

Operation	: Size	:	:Time per acre:			:Average time per	
	: of	:Times:	once over		:Acreage:	acre - all farms	
	:equipment:	over	Man	Power	:covered:	Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Plow, moldboard	:2-16 inch	1.0	0.98	0.93	21	0.21	0.20
Plow, moldboard	:3-16 inch	1.0	.69	.66	40	.28	.26
Disk, single	:15-foot	1.4	.23	.21	93	.30	.27
Harrow, spiketooth	:25-foot	1.8	.10	.09	96	.17	.15
Seed, drill	:12-foot	1.0	.25	.23	64	.16	.15
Seed, endgate	:30-foot	1.0	.12	.10	36	.04	.04
Harrow, spiketooth	:25-foot	1.2	.11	.10	35	.05	.04
Total preharvest	:					1.21	1.11
Swath	:12-foot	1.0	.23	.22	81	.19	.18
Swath, contract	:12-foot	1.0	.30	.28	9	.03	.03
Combine	: 9-foot	1.0	.44	.38	72	.32	.27
Combine, contract	:12-foot	1.0	.47	.33	18	.08	.06
Haul from combine	: ---	1.0	.52	.23	9	.05	.02
Haul from combine, t.	: ---	1.0	.42	.20	74	.31	---
Haul, truck, contract	: ---	1.0	.35	.19	7	.02	---
Bind	: 8-foot	1.0	.75	.39	10	.08	.04
Shock by hand	: ---	1.0	.79	---	10	.08	---
Haul bundles	: ---	1.0	2.57	.68	10	.26	.07
Thresh	: ---	1.0	.43	.39	10	.04	.04
Haul grain	: ---	1.0	.37	.26	2	.01	.01
Total harvest	:					1.47	.72
Total <u>1/</u>	:					2.68	1.83

1/ In addition, truck use averaged 0.16 hour an acre.

WHEAT, SPRING: RESOURCES USED IN PRODUCTION, AREA V-F⁴, 1949

The data presented here are based on a survey made in 1950 of approximately 42 farms producing spring wheat in 1949, in northeastern South Dakota and west central Minnesota. These farms are located in type-of-farming area V-F⁴, a livestock and cash-grain area in the northwestern Corn Belt fringe.

The farms surveyed averaged 355 total acres per farm. In 1949, 285 acres were in crops, including 36 in spring wheat. The average yield of spring wheat was approximately 15 bushels per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of the tractors ranged from 15 to 27; the most common was about 20.

Materials used and contract work hired, 1949

MATERIALS USED

Item	: Unit	: Quantity: per acre	: Price: per unit	: Cost: per acre	: Average: Acreage: covered	: Average: cost per acre
		: Number	: Dollars	: Dollars	: Percent	: Dollars
Seed ¹ / ₁	: Bu.	: 1.6	: 2.10	: 3.36	: 100	: 3.36
Ceresan	: Bu.	: 1.6	: .02	: .03	: 40	: .01
Manure	: Ton	: 5	: ² / _{2.00}	: 10.00	: 9	: .90
Mixed fertilizer	: Cwt.	: 1.85	: 2.80	: 5.18	: 4	: .21
Spray (2,4-D)	: Pt.	: 1.0	: .75	: .75	: 18	: .14
Twine	: Lb.	: 1.9	: .23	: .44	: 35	: .15
Total materials						: 4.77

CONTRACT WORK HIRED

Cleaning & treating seed:	Bu.	: 1.6	: .15	: .24	: 41	: .98
Spraying	: Acre	: 1.0	: .90	: .90	: 5	: .04
Threshing	: Bu.	: 15	: .09	: 1.35	: 20	: .27
Hauling grain	: Bu.	: 15	: .05	: .75	: 9	: .07
Total contract work						: 1.36

¹/ Approximately 31 percent of the farmers in this area purchased seed wheat.

²/ Estimated.

Man labor, power, and machinery used by operation in producing and
harvesting spring wheat, area V-F⁴, northeastern South Dakota
and west central Minnesota, 1949

Operation	: Size :	:Time per acre:			:Average time per		
	: of :	:Times:	once over		:Acreage:	acre - all farms	
	:equipment:	:over :	Man	Power	:covered:	Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Apply manure, spreader	: ---	1.0	2.21	1.44	9	0.20	0.13
Plow, moldboard	:2-16 inch	1.0	1.16	1.10	19	.22	.21
Plow, moldboard	:3-14 inch	1.0	.84	.80	74	.62	.59
Disk, single	:15-foot	1.7	.23	.22	71	.28	.27
Field cultivate	: 9-foot	1.1	.36	.34	18	.07	.07
Harrow, spiketooth	:26-foot	2.4	.12	.11	93	.27	.25
Clean and treat seed	: ---	1.0	.05	---	40	.02	---
Drill	:11-foot	1.0	.31	.30	100	.31	.30
Harrow, spiketooth	:26-foot	1.0	.12	.11	47	.06	.05
Spray	:30-foot	1.0	.22	.18	18	.04	.03
Spray, contract	:30-foot	1.0	.22	.18	5	.01	.01
Total preharvest	:					2.10	1.91
Windrow	:12-foot	1.0	.33	.32	64	.21	.20
Combine	: 6-foot	1.0	.64	.58	36	.23	.21
Combine	:10-foot	1.0	.48	.44	18	.09	.08
Combine, self-propelled	:12-foot	1.0	.37	.34	11	.04	---
Haul from combine	: ---	1.0	.33	.33	19	.06	.06
Haul from combine, t.	: ---	1.0	.36	.36	46	.17	---
Bind	: 8-foot	1.0	.52	.47	19	.10	.09
Bind	:10-foot	1.0	.44	.41	16	.07	.07
Shock	: ---	1.0	.68	---	35	.24	---
Haul bundles, horses	: ---	1.0	1.61	2.58	35	.56	---
Thresh	:26-inch	1.0	.33	.26	15	.05	.04
Thresh, contract	:26-inch	1.0	.33	.26	20	.07	.05
Haul grain	: ---	1.0	.36	.26	26	.09	.07
Haul grain, contract	: ---	1.0	.36	.26	9	.03	.02
Total harvest	:					2.01	.89
Total 1/	:					4.11	2.80

1/ In addition, horse work averaged 0.90 hour an acre, truck use 0.17 hour an acre, and self-propelled combine 0.04 hour an acre.

WHEAT, SPRING (SUMMER FALLOW): RESOURCES USED IN PRODUCTION,
AREA II-B1, 1950

The data presented here are based on a survey in 1951 of 37 farms that produced wheat on land that was fallow in the summer of 1949. These farms are located in type-of-farming area II-B1. This is primarily a livestock area in western South Dakota, but some crops are also produced.

The farms surveyed averaged 1,365 total acres. In 1950 an average of 592 acres were in crops, including 95 acres in spring wheat. The yield of spring wheat averaged 16 bushels per acre.

Tractors and motorized equipment provide all of the power used in producing spring wheat on these farms. The drawbar-horsepower rating of tractors on these farms ranged from 11 to 36; the most common was about 24.

Materials used and contract work hired, 1950

MATERIALS USED

Item	: Unit	: Quantity:	Price	: Cost	: Average
		: per	: per	: per	: Acreage:
		: acre	: unit	: acre	: covered:
		: <u>Number</u>	<u>Dollars</u>	<u>Dollars</u>	<u>Percent</u>
					<u>Dollars</u>
Seed ^{1/}	: Bu.	: 1.1	2.45	2.70	100
Spray (2,4-D)	: Pt.	: 1.0	.44	.44	13
Total materials	:	:			
					2.76

CONTRACT WORK HIRED

Combining	: Acre	: 1.0	3.30	3.30	12	.40
Total contract work	:	:				.40

^{1/} Approximately 9 percent of the farmers in this area purchased seed wheat.

Man labor, power, and machinery used by operation in producing and
harvesting spring wheat, summer fallow, area II-B1,
western South Dakota, 1950

Operation	: Size : of : equipment:	: Times: : over : No.	: Time per acre:			: Average time per	
			: once over			: Acreage: acre - all farms	
			Man	Power	covered:	Man	Tractor
			<u>Hrs.</u>	<u>Hrs.</u>	<u>Pct.</u>	<u>Hrs.</u>	<u>Hrs.</u>
Plow, moldboard	: 3-14 inch	1.0	0.67	0.64	44	0.29	0.28
Plow, one-way	: 8-foot	1.0	.32	.30	44	.14	.13
Disk, single	: 15-foot	3.1	.15	.15	52	.24	.24
Disk, tandem	: 12-foot	1.9	.23	.22	24	.11	.10
Harrow, spiketooth	: 30-foot	1.0	.08	.07	11	.01	.01
Field cultivate	: 10-foot	3.0	.28	.26	25	.21	.20
Seed, drill	: 12-foot	1.0	.23	.21	100	.23	.21
Duckfoot	: 9-foot	1.5	.31	.29	4	.02	.02
Harrow, spiketooth	: 25-foot	1.0	.09	.08	34	.03	.03
Spray	: 30-foot	1.0	.11	.10	13	.01	.01
Total preharvest	:					1.29	1.23
Swath	: 12-foot	1.0	.22	.21	28	.06	.06
Combine	: 10-foot	1.0	.34	.32	56	.19	.18
Combine, s.p.	: 14-foot	1.0	.31	.29	32	.10	---
Combine, s.p., contract:	14-foot	1.0	.26	.24	12	.03	---
Haul grain, truck	: ---	1.0	.24	.13	100	.24	---
Total harvest	:					.62	.24
Total 1/	:					1.91	1.47

1/ In addition, truck use averaged 0.13 hour an acre and self-propelled combines 0.12 hour an acre.

WHEAT, SPRING (SUMMER FALLOW): RESOURCES USED IN PRODUCTION,
AREA III-A2, 1950

Data presented here are based on a survey in 1951 of 18 farms that produced spring wheat on land that was fallow in the summer of 1949.

These farms are located in type-of-farming area III-A2 in central North Dakota and north central South Dakota. This is a specialized wheat area although other small grains, flax, and livestock also are produced.

The farms surveyed averaged 541 acres. In 1950, an average of 366 acres were in crops, including 81 acres in spring wheat on fallow. The yield was about 16 bushels per harvested acre.

Tractors and motorized equipment provided most of the power used on these farms. Horses were used for hauling bundles on farms where wheat was threshed. The drawbar-horsepower rating of tractors ranged from 11 to 34; the most common was about 21.

Materials used and contract work hired, 1950 1/

MATERIALS USED

Item	: Unit	: Quantity: per acre	: Price : per unit	: Cost : per acre	: Average Acreage: covered	: Average cost per acre
		: Number	Dollars	Dollars	Percent	Dollars
Seed <u>2/</u>	: Bu.	: 1.3	2.25	2.92	100	2.92
Spray	: Pt.	: 1.0	.65	.65	27	.18
Twine	: Lb.	: 3.9	.24	.94	6	.06
Total materials	:	:				3.16

1/ No contract work was reported on farms surveyed in this area.

2/ Approximately 4 percent of the farmers in this area purchased seed wheat.

Man labor, power, and machinery used by operation in producing and
harvesting spring wheat, summer fallow, area III-A2, central
North Dakota and north central South Dakota, 1950

Operation	: Size	: Times	:Time per acre:			:Average time per	
	: of	:over	:once over			:acre - all farms	
	:equipment:	:over	: Man	:Power	:covered:	: Man	: Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Plow, moldboard	:3-14 inch	1.0	0.84	0.80	22	0.18	0.18
Plow, one-way	: 8-foot	1.0	.30	.28	34	.10	.10
Disk, single	:18-foot	3.2	.16	.16	37	.19	.19
Disk, tandem	: 8-foot	1.5	.44	.42	11	.07	.07
Harrow, spiketooth	:24-foot	1.5	.11	.10	36	.06	.05
Field cultivate	:10-foot	2.5	.33	.32	29	.24	.23
Seed, drill	: 8-foot	1.0	.30	.27	100	.30	.27
Spray	:30-foot	1.0	.10	.09	27	.03	.02
Total preharvest	:	:	:	:	:	1.17	1.11
Swath	:12-foot	1.0	.22	.21	94	.21	.20
Combine	:10-foot	1.0	.44	.41	94	.41	.39
Bind	: 8-foot	1.0	.80	.46	6	.05	.03
Shock	: ---	1.0	1.39	---	6	.08	---
Haul bundles, horses	: ---	1.0	3.19	4.46	6	.19	---
Thresh	:26-inch	1.0	.75	.66	6	.04	.04
Haul grain, truck	: ---	1.0	.48	.36	100	.48	---
Total harvest	:	:	:	:	:	1.46	.66
Total 1/	:	:	:	:	:	2.63	1.77

1/ In addition, truck use averaged 0.36 hour an acre and horse work 0.27 hour an acre.

WHEAT, SPRING (SUMMER FALLOW): RESOURCES USED IN PRODUCTION,
AREA III-A3, 1947

The data presented here are based on a survey made in 1948 of 46 farms ranging in size from 340 to 700 acres. All except 8 of these farms produced some wheat on land that was fallow in the summer of 1946. These farms are primarily crop farms located in central and northern North Dakota. Production of oats, barley, and flax is also important on these farms.

The 46 farms surveyed averaged 507 total acres. In 1947, cropland averaged 411 acres, of which 190 acres were in wheat. About 39 percent of the wheat grown was planted on fallow land. The 38 farms that planted wheat on fallow averaged 90 acres of wheat on fallow per farm. Data are not available for estimating yield of wheat on fallow land, but average yield of all wheat in 1947 was 15 bushels per acre.

Tractors provided most of the power used in the production of wheat. Trucks were used to haul the wheat from combines and threshers, and horses were used to haul bundles on farms where wheat was threshed. The drawbar-horsepower rating of tractors used on these farms ranged from 10 to 32. The most common was about 21.

Materials used and contract work hired, 1947

MATERIALS USED

Item	Unit	Quantity: per acre	Price per unit Dollars	Cost per acre Dollars	Average Acreage: covered Percent	Average cost per acre Dollars
Home-grown seed	Bu.	1.4	2.35	3.29	67	2.20
Purchased seed	Bu.	1.4	2.80	3.92	33	1.29
Ceresen	Bu.	1.4	.04	.06	70	.04
Twine	Lb.	2.0	.23	.46	46	.21
Total materials						3.74

CONTRACT WORK HIRED

Combining	Acre	1.0	3.65	3.65	9	.33
Total contract work						.33

Man labor, power, and machinery used by operation in producing and harvesting spring wheat, summer fallow, area III-A3, central and northern North Dakota, 1947

Operation	: Size :	:Time per acre:			:Average time per		
	: of :	:Times:	:once over		:Acreage:	:acre - all farms	
	:equipment:	:over :	:Man	:Power	:covered:	:Man	: Tractor
		<u>No.</u>	<u>Hrs.</u>	<u>Hrs.</u>	<u>Pct.</u>	<u>Hrs.</u>	<u>Hrs.</u>
Summer work (1946):	:	:	:	:	:	:	:
Disk, single	:15-foot	2.3	0.23	0.22	15	0.08	0.08
Disk, tandem	: 9-foot	1.3	.33	.32	16	.07	.07
Plow, moldboard	:3-14 inch	1.2	.87	.83	91	.95	.91
Disk, single	:15-foot	1.8	.23	.22	26	.11	.10
Disk, tandem	: 9-foot	2.8	.33	.32	50	.46	.45
Field' cultivate	:10-foot	3.5	.29	.28	56	.57	.55
Harrow, spiketooth	:29-foot	1.6	.14	.13	18	.04	.04
Spring work (1947):	:	:	:	:	:	:	:
Plow, moldboard	:3-14 inch	1.0	.87	.83	9	.08	.07
Disk	:10-foot	1.1	.36	.34	29	.11	.11
Field cultivate	:12-foot	1.5	.28	.26	36	.15	.14
Harrow, spiketooth	:26-foot	1.0	.14	.13	79	.11	.10
Drill	:11-foot	1.0	.32	.31	78	.25	.24
Disk, harrow and drill	:10-foot	1.0	.36	.34	15	.05	.05
Plow, pack & pony drill	:42-inch	1.0	.87	.84	7	.06	.06
Total preharvest	:	:	:	:	:	3.09	2.97
Windrow	:12-foot	1.0	.33	.31	52	.17	.16
Combine	: 7-foot	1.0	.67	.56	25	.17	.14
Combine	:12-foot	1.0	.54	.40	20	.11	.08
Combine, contract	:12-foot	1.0	.54	.40	9	.05	.04
Haul from combine, t.	: ---	1.0	.35	.26	54	.19	---
Bind	: 8-foot	1.0	.67	.47	26	.17	.12
Bind	:10-foot	1.0	.53	.37	20	.11	.07
Shock by hand	: ---	1.0	.75	---	37	.28	---
Haul bundles, horses	: ---	1.0	1.66	3.05	46	.76	---
Thresh	:28-inch	1.0	.27	.25	46	.12	.12
Haul grain, truck	: ---	1.0	.42	.25	46	.19	---
Total harvest	:	:	:	:	:	2.32	.73
Total 1/	:	:	:	:	:	5.41	3.70

1/ In addition, horse work averaged 1.40 hours an acre and truck use 0.26 hour an acre.

WHEAT, SPRING (SUMMER FALLOW): RESOURCES USED IN PRODUCTION,
AREA III-C2, 1950

The data presented here are based on a survey made in 1951 of 25 farms producing spring wheat after summer fallow. These farms are located in type-of-farming area III-C2, a wheat and range-livestock area in northeastern Montana and southwestern North Dakota.

The farms surveyed averaged 1,019 acres per farm. Cropland comprised about 675 acres. In 1950, 274 acres were in spring wheat on fallow, and the yield averaged about 17 bushels per acre.

Tractors provided most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 17 to 34; the most common was about 26.

Materials used and contract work hired, 1950

MATERIALS USED

Item	: Unit	: Quantity: per acre	: Price per unit	: Cost per acre	: Average Acreage: covered	: cost per acre
		: Number	Dollars	Dollars	Percent	Dollars
Home-grown seed	: Bu.	: 0.9	2.00	1.80	92	1.66
Purchased seed	: Bu.	: .9	2.15	1.94	8	1.55
Superphosphate (40%)	: Cwt.	: .40	3.35	1.34	4	.05
Spray (2,4-D)	: Pt.	: .9	.55	.50	30	.15
Total materials	:	:	:	:		<u>3.41</u>

CONTRACT WORK HIRED

Spraying	: Acre	: 1.0	1.60	1.60	20	<u>.32</u>
Total contract work	:	:	:	:		<u>.32</u>

Man labor, power, and machinery used by operation in producing and
harvesting spring wheat, summer fallow, area III-C2,
northeastern Montana and southwestern
North Dakota, 1950

Operation	Size	Time per acre:			Average time per		
	of	Times:	once over	Acreage:	acre - all farms		
	equipment:	over	Man	Power	covered:	Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Plow, moldboard	: 3-14 inch	1.0	0.69	0.66	34	0.23	0.22
Plow, one-way	: 8-foot	1.5	.39	.37	68	.40	.38
Field cultivate	: 10-foot	2.6	.31	.29	70	.56	.53
Disk, tandem	: 10-foot	2.9	.25	.24	22	.16	.15
Disk, single	: 25-foot	1.5	.12	.12	15	.03	.03
Harrow, springtooth	: 12-foot	1.0	.22	.21	7	.02	.01
Harrow, spiketooth	: 20-foot	2.5	.13	.13	8	.03	.03
Drill	: 12-foot	1.0	.23	.21	49	.11	.10
Disk and drill	: 10-foot	1.0	.29	.26	51	.15	.13
Spray	: 36-foot	1.0	.10	.09	10	.01	.01
Spray, airplane, contract	: ---	1.0	.03	---	20	.01	---
Total preharvest	:					1.71	1.59
Windrow	: 14-foot	1.0	.21	.20	20	.04	.04
Combine	: 12-foot	1.0	.38	.32	100	.38	.32
Haul grain, truck	: ---	1.0	.31	.20	100	.31	---
Total harvest	:					.73	.36
Total <u>1/</u>	:					2.44	1.95

1/ In addition, truck use averaged 0.20 hour an acre.

WHEAT, SPRING (AFTER CORN): RESOURCES USED IN PRODUCTION,
AREA II-B1, 1950

The data presented here are based on a survey in 1951 of 15 farms that produced wheat on land planted in corn in 1949. These farms are located in type-of-farming area II-B1. This is primarily a livestock area in western South Dakota, but some crops are also produced.

The farms surveyed averaged 1,373 total acres. In 1950, an average of 658 acres were in crops, including 68 acres in spring wheat. The yield of spring wheat averaged about 10 bushels per acre.

Tractors and motorized equipment provide all the power used in producing spring wheat on these farms. The drawbar-horsepower rating of tractors on these farms ranged from 14 to 36; the most common was about 25.

Materials used and contract work hired, 1950

MATERIALS USED

Item	: Unit	: Quantity:	Price	: Cost	: Average	
		: per	: per	: per	: Acreage:	cost
		: acre	: unit	: acre	: covered:	per acre
		: Number	Dollars	Dollars	Percent	Dollars
Home-grown seed	: Bu.	: 1.3	2.25	2.92	78	2.27
Purchased seed	: Bu.	: 1.3	2.70	3.51	22	.77
Total materials	:	:				3.04

CONTRACT WORK HIRED

Combining	: Acre	: 1.0	3.11	3.11	19	.59
Total contract work	:	:				.59
	:	:				

Man labor, power, and machinery used by operation in producing and
harvesting spring wheat, after corn, area II-B1,
western South Dakota, 1950

Operation	: Size :	:Time per acre:			:Average time per		
	: of :	:Times:	once over		:Acreage:	acre - all farms	
	:equipment:	over :	Man	Power	:covered:	Man	: Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Plow, moldboard	:4-14 inch	1.0	0.36	0.35	12	0.04	0.04
Plow, disk	: 8-foot	1.0	.32	.30	24	.08	.07
Duckfoot	: 9-foot	1.0	.34	.33	10	.03	.03
Disk, single	:15-foot	1.9	.19	.18	63	.23	.21
Harrow, spiketooth	:25-foot	1.3	.09	.08	73	.09	.07
Seed, drill	:14-foot	1.0	.21	.19	88	.18	.17
Disk and drill	:11-foot	1.0	.32	.30	12	.04	.04
Total preharvest	:					.69	.63
Swath	:14-foot	1.0	.19	.18	32	.06	.06
Combine	:12-foot	1.0	.28	.26	57	.16	.15
Combine, s.p.	:12-foot	1.0	.37	.34	24	.09	---
Combine, s.p.,contract	:12-foot	1.0	.37	.34	19	.07	---
Haul from combine, t.	: ---	1.0	.31	.17	100	.31	---
Total harvest	:					.69	.21
Total <u>1/</u>	:					1.38	.84

1/ In addition, self-propelled combines averaged 0.15 hour an acre and truck use 0.17 hour an acre.

WHEAT, SPRING (AFTER CORN): RESOURCES USED IN PRODUCTION,
AREA III-A2, 1950

Data presented here are based on a survey in 1951 of 18 farms that produced wheat on land that was planted in corn the previous year. These farms are located in type-of-farming area III-A2 in central North Dakota and north central South Dakota. This is a specialized wheat area although other small grains, flax, and livestock also are produced.

The farms surveyed averaged 70⁴ acres. In 1950, an average of 44⁵ acres were in crops, including 41 acres in spring wheat after corn. The yield of spring wheat averaged about 12 bushels per harvested acre.

Tractors and motorized equipment provided most of the power used on these farms. Horses were used for hauling bundles on the farms where wheat was threshed. The drawbar-horsepower rating of tractors on these farms ranged from 9 to 36; the most common was about 22.

Materials used and contract work hired, 1950 1/

MATERIALS USED

Item	: Unit	: Quantity	: Price	: Cost	: Average	
		: per	: per	: per	: Acreage	: cost
		: acre	: unit	: acre	: covered	: per acre
		: <u>Number</u>	<u>Dollars</u>	<u>Dollars</u>	<u>Percent</u>	<u>Dollars</u>
Seed <u>2/</u>	: Bu.	: 1.3	2.25	2.92	100	2.92
Twine	: Lb.	: 3.1	.24	.74	22	.16
Total materials	:	:				3.08

1/ No contract work was reported on farms surveyed in this area.

2/ Approximately 19 percent of the farmers in this area purchased seed wheat.

Man labor, power, and machinery used by operation in producing and
harvesting spring wheat, after corn, area III-A2, central
North Dakota and north central South Dakota, 1950

Operation	: Size :	:Time per acre:			:Average time per		
	: of :	:Times:	:once over		:Acreage:	:acre - all farms	
	:equipment:	:over :	: Man	:Power	:covered:	: Man	: Tractor
		<u>No.</u>	<u>Hrs.</u>	<u>Hrs.</u>	<u>Pct.</u>	<u>Hrs.</u>	<u>Hrs.</u>
Plow, moldboard	:3-14 inch	1.0	0.81	0.78	47	0.38	0.37
Plow, one-way	:10-foot	2.0	.35	.34	3	.02	.02
Disk, single	:10-foot	2.0	.21	.20	29	.12	.12
Disk, tandem	:10-foot	1.0	.26	.25	22	.06	.06
Harrow, spiketooth	:24-foot	1.8	.11	.10	76	.15	.14
Field cultivate	:12-foot	1.0	.22	.21	5	.01	.01
Seed, drill	:12-foot	1.0	.28	.25	78	.22	.20
Plow, pack & pony drill:	4-foot	1.0	.70	.64	22	.15	.14
Total preharvest	:					1.11	1.06
Swath	:12-foot	1.0	.22	.21	78	.17	.16
Combine	: 9-foot	1.0	.43	.40	67	.29	.27
Combine, self-propelled:	9-foot	1.0	.34	.31	11	.04	---
Haul grain, truck	: ---	1.0	.34	.20	78	.27	---
Bind	: 8-foot	1.0	.71	.33	22	.16	.07
Shock	: ---	1.0	1.46	---	22	.32	---
Haul bundles, horses	: ---	1.0	2.36	3.44	22	.52	---
Thresh	:28-inch	1.0	.54	.47	22	.12	.10
Haul grain, horses	: ---	1.0	.47	.87	22	.10	---
Total harvest	:					1.99	.60
Total 1/	:					3.10	1.66

1/ In addition, self-propelled combines averaged 0.03 hour an acre, horse work 0.95 hour an acre, and truck use 0.16 hour an acre.

WHEAT, SPRING (AFTER CORN): RESOURCES USED IN PRODUCTION,
AREA III-C2, 1950

The data presented here are based on a survey made in 1951 of 18 farms producing spring wheat, after corn. These farms are located in type-of-farming area III-C2, a wheat and range-livestock area in northeastern Montana and southwestern North Dakota.

The farms surveyed averaged 1,503 acres per farm. Cropland comprised about 729 acres. In 1950, 56 acres were in spring wheat, and the yield averaged about 12 bushels per acre.

Tractors provided most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 17 to 35; the most common was about 26.

Materials used and contract work hired, 1950

MATERIALS USED

Item	: Unit	: Quantity:	Price	: Cost	: Average
		: per	: per	: per	: Acreage: cost
		: acre	: unit	: acre	: covered: per acre
		: Number	Dollars	Dollars	Percent Dollars
Seed, home-grown	: Bu.	: 1.1	1/2.00	2.20	100 2.20
Total materials	:	:			2.20

CONTRACT WORK HIRED

Combining	: Acre	: 1.0	3.75	3.75	16 .60
Total contract work	:	:			.60

1/ Estimated.

Man labor, power, and machinery used by operation in producing and harvesting spring wheat, after corn, area III-C2, northeastern Montana and southwestern North Dakota, 1950

Operation	: Size :	:Time per acre:			:Average time per		
	: of :	:Times:	once over		:Acreage:	acre - all farms	
	:equipment:	over :	Man :	Power :	covered:	Man :	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Plow, moldboard	:3-14 inch	1.0	0.80	0.77	22	0.18	0.17
Plow, moldboard	:4-14 inch	1.0	.55	.53	19	.10	.10
Plow, one-way	: 8-foot	1.0	.47	.45	10	.05	.04
Disk, tandem	:10-foot	2.2	.27	.26	63	.37	.36
Harrow, spiketooth	:20-foot	2.0	.15	.15	59	.18	.18
Drill	:14-foot	1.0	.23	.21	100	.23	.21
Total preharvest	:					1.11	1.06
Windrow	:14-foot	1.0	.21	.20	37	.08	.07
Combine	:12-foot	1.0	.35	.32	84	.29	.27
Combine, contract	:12-foot	1.0	.26	.24	16	.04	.04
Haul grain, truck	: ---	1.0	.31	.18	100	.31	---
Total harvest	:					.72	.38
Total 1/	:					1.83	1.44

1/ In addition, truck use averaged 0.18 hour an acre.

WHEAT, WINTER: RESOURCES USED IN PRODUCTION, AREA II-B4, 1950

The data presented here are based on a survey in 1950 of 30 farms producing wheat. These farms are located in type-of-farming area II-B4 in the Osage-Flint Hills of Kansas and Oklahoma. Stock raising is the most important enterprise in this area.

The farms surveyed averaged 436 total acres. In 1950, 199 acres were in crops, including 64 acres in wheat. The yield of wheat averaged about 17 bushels per acre.

Tractors and motorized equipment provide all the power used in producing wheat. The drawbar-horsepower rating of these tractors ranged from 17 to 26; the most common was about 20.

Materials used and contract work hired, 1950

MATERIALS USED

Item	: Unit	: Quantity:	Price	: Cost	: Average	
		: per	: per	: per	: Acreage:	cost
		: acre	: unit	: acre	: covered:	per acre
		: Number	Dollars	Dollars	Percent	Dollars
Seed ^{1/}	: Bu.	: 1.2	2.05	2.46	100	2.46
Mixed fertilizer	: Cwt.	: 1.10	3.70	4.07	26	1.06
Nitrate fertilizer	: Cwt.	: 1.00	3.00	3.00	4	.12
Phosphate fertilizer	: Cwt.	: .80	3.25	2.60	21	.55
Total materials	:	:				4.19

CONTRACT WORK HIRED

Combining	: Acre	: 1.0	3.00	3.00	15	.45
Hauling	: Bu.	: 17	.05	.85	15	.13
Total contract work	:	:				.58

^{1/} Approximately 26 percent of the farmers in this area purchased seed wheat.

Man labor, power, and machinery used by operation in producing and
harvesting winter wheat, area II-B4, east central Kansas
and north central Oklahoma, 1950

Operation	: Size :	:Time per acre:			:Average time per		
	: of :	:Times:	once over		:Acreage:	acre - all farms	
	:equipment:	:over :	Man	Power	:covered:	Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Plow, moldboard	:2-14 inch	1.0	1.31	1.25	100	1.31	1.25
Disk, tandem	: 8-foot	1.2	.44	.42	76	.40	.38
Harrow, spiketooth	:14-foot	1.6	.24	.22	71	.27	.25
Harrow, springtooth	: 9-foot	2.3	.42	.38	37	.36	.32
Seed, drill	:10-foot	1.0	.42	.40	100	.42	.40
Total preharvest	:					2.76	2.60
Combine	: 6-foot	1.0	.97	.72	85	.82	.61
Combine, contract	: 6-foot	1.0	.81	.59	15	.12	.09
Haul from combine, truck:	1½-ton	1.0	.70	.70	85	.60	---
Haul, truck, contract	:1½-ton	1.0	.70	.70	15	.10	---
Total harvest	:					1.64	.70
Total 1/	:					4.40	3.30

1/ In addition, truck use averaged 0.70 hour an acre.

WHEAT, WINTER (CONTINUOUS CROPPING): RESOURCES USED IN
PRODUCTION, AREA III-A4, 1952

The data presented here are based on a survey made in 1952 of 15 farms producing winter wheat in type-of-farming area III-A4. This is a wheat and small grain area in the central plains along the Platte and Laramie Rivers in southeastern Wyoming, southwestern Nebraska, and northeastern Colorado. The farms are comparatively large, and wheat production is the dominant enterprise. Most of the wheat grown, however, is on fallowed ground. Continuous cropping of wheat occurs only in occasional years when the farm operator is attempting to readjust his enterprise or desires to take advantage of temporary economic situations.

The farms surveyed averaged 1,640 acres per farm. Cropland comprised about 1,030 acres. In 1952, 40 acres were in wheat and the yield averaged approximately 13.5 bushels per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The drawbar-horsepower rating of the tractors ranged from 27 to 34; the most common was about 31.

Materials used and contract work hired, 1952

MATERIALS USED

Item	: Unit	: Quantity: per	Price : per	Cost : per	: Average	
		: acre	: unit	: acre	: covered:	per acre
		: Number	Dollars	Dollars	Percent	Dollars
Seed	: Bu.	: 0.8	1.90	1.52	100	1.52
Total materials	:	:				1.52

CONTRACT WORK HIRED

Treating seed	: Bu.	: .8	.11	.09	30	.03
Trucking	: Bu.	: 13.5	.05	.68	2	.01
Combining	: Acre	: 1.0	3.50	3.50	2	.07
Total contract work	:	:				.11

Man labor, power, and machinery used by operation in producing and harvesting winter wheat, continuous cropping, area III-A4, southeastern Wyoming, southwestern Nebraska, and northeastern Colorado, 1952

Operation	: Size	:	:Time per acre:			:Average time per	
	: of	:Times:	once over		:Acreage:	acre - all farms	
	:equipment:	over	Man	Power	covered:	Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Plow, moldboard	:3-16 inch	1.0	0.70	0.67	46	0.32	0.31
Plow, wheatland	:10-foot	1.5	.29	.27	63	.28	.25
Disk, tandem	:12-foot	1.5	.22	.21	23	.08	.07
Harrow, spiketooth	:20-foot	1.5	.15	.14	25	.06	.05
Weed, rod weeder	:12-foot	1.0	.24	.22	28	.07	.06
Seed, drill	:14-foot	1.0	.30	.27	100	.30	.27
Total preharvest	:					1.11	1.01
Combine, self-propelled	:12-foot	1.0	.38	.34	82	.31	---
Combine	:12-foot	1.0	.51	.44	16	.08	.07
Combine, s.p., contract	:12-foot	1.0	.38	.34	2	.01	---
Truck	:1½-ton	1.0	.34	.38	98	.33	---
Truck, contract	:1½-ton	1.0	.34	.38	2	.01	---
Total harvest	:					.74	.07
Total 1/	:					1.85	1.08

1/ In addition, truck use averaged 0.38 hour an acre and self-propelled combines 0.29 hour an acre.

WHEAT, WINTER (CONTINUOUS CROPPING): RESOURCES USED IN PRODUCTION,
AREA III-D1, 1948

The data presented here are based on a survey of 164 farms in 1949. About 110 of the farms grew wheat on land that had been in crops the previous year. These farms are located in the High Plains of the Panhandle of Texas and Oklahoma and in southwestern Kansas. Crop production, primarily wheat and grain-sorghum, is the most important enterprise on these farms.

The farms surveyed averaged 719 total acres. In 1948, about 595 acres were in cropland including 167 acres of fallow, failure, idle and pasture. Wheat was harvested from 283 acres, of which 192 acres were planted on land that had been in crops the previous year. Wheat failure on this land was equal to 19 percent of the planted acreage. The average yield of wheat was about 13 bushels per harvested acre.

These farms are highly mechanized, and tractors and motorized equipment provide all the power used in the production of wheat. The drawbar-horsepower rating of the tractors ranged from 11 to 36; the most common was about 23.

Materials used and contract work hired, 1948

MATERIALS USED

Item	: Unit	: Quantity:	Price	: Cost	: Average	
		: per	: per	: per	: Acreage:	cost
		: acre	: unit	: acre	: covered:	per acre
		: Number	Dollars	Dollars	Percent	Dollars
Home-grown seed	: Bu.	: 0.57	2.45	1.40	54	0.76
Purchased seed	: Bu.	: .57	3.20	1.82	46	.84
Total materials	:	:				1.60

CONTRACT WORK HIRED

Seed cleaning	: Bu.	: .57	.06	.03	48	.01
Combining	: Acre	: 1.0	2.90	2.90	26	.75
Hauling	: Bu.	: 13	.06	.78	33	.26
Total contract work	:	:				1.02

Man labor, power, and machinery used by operation in producing and
harvesting winter wheat, continuous cropping, area III-D1,
southwestern Kansas and the Panhandle of Oklahoma
and Texas, 1948

Operation	: Size	: Time per acre:	: Average time per				
	: of	: Times: once over	: Acreage:	: acre - all farms			
	: equipment:	: over	: Man	: Power	: covered:	: Man	: Tractor
		<u>No.</u>	<u>Hrs.</u>	<u>Hrs.</u>	<u>Pct.</u>	<u>Hrs.</u>	<u>Hrs.</u>
Plow, one-way	: 13-foot	2.4	0.24	0.23	97	0.56	0.54
Field cultivate	: 14-foot	1.3	.24	.23	87	.27	.26
Seed, drill	: 14-foot	1.0	.21	.20	100	.21	.20
Total preharvest	:					1.04	1.00
Combine	: 12-foot	1.0	.53	.27	74	.39	.20
Combine, contract	: 12-foot	1.0	.53	.27	26	.14	.07
Haul grain, truck	: 1½-ton	1.0	.20	.17	67	.13	---
Haul grain, contract, t.	: 1½-ton	1.0	.20	.17	33	.07	---
Total harvest	:					.73	.27
Total <u>1/</u>	:					1.77	1.27

1/ In addition, truck use averaged 0.17 hour an acre.

WHEAT, WINTER: RESOURCES USED IN PRODUCTION,
AREA III-E4, 1950

The data presented here are based on a survey made in 1951 of 59 farms producing wheat in central Kansas. These farms are located in the Kansas portion of type-of-farming area III-E4, a wheat and general farming area in central Kansas and Oklahoma.

The farms surveyed averaged about 485 acres per farm. Crop-land comprised about 350 acres. In 1950, 239 acres were in wheat, and the yield averaged slightly more than 13 bushels per acre.

Tractors and motorized equipment provide all of the power used in the production of wheat on these farms. The drawbar-horsepower rating of tractors ranged from 16 to 40; the most common was about 25.

Materials used and contract work hired, 1950

MATERIALS USED

Item	: Unit	: Quantity: per acre	: Price : per unit	: Cost : per acre	: Average Acreage: covered	: cost per acre
		: Number	Dollars	Dollars	Percent	Dollars
Seed ^{1/}	: Bu.	: 0.9	2.10	1.89	100	1.89
Manure	: Ton	: ^{2/}	2.00	14.00	2	.28
Mixed fertilizer	: Cwt.	: .75	2.25	1.69	2	.03
Nitrate fertilizer	: Cwt.	: .90	3.80	3.42	2	.07
Phosphate fertilizer	: Cwt.	: .55	3.60	1.98	7	.14
Spray (2,4-D)	: Pt.	: 1.4	.90	1.26	5	.06
Parathion	: Pt.	: 1.0	.75	.75	4	.03
Total materials						2.50

CONTRACT WORK HIRED

Spraying	: Acre	: 1.0	1.50	1.50	3	.05
Total contract work:						.05

^{1/} Approximately 18 percent of the farmers in this area used home-grown wheat seed.

^{2/} Estimated.

Man labor, power, and machinery used by operation in producing and harvesting winter wheat, area III-E4, central Kansas, 1950

Operation	Size	Time per acre:			Average time per		
	of	Times:	once over	Acreage:	acre - all farms		
	equipment:	over	Man	Power	covered:	Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Apply manure, spreader	: 2-ton	1.0	2.46	1.12	2	0.05	0.02
Plow, moldboard	: 3-16 inch	1.0	.70	.67	55	.38	.37
Plow, moldboard	: 4-14 inch	1.0	.50	.47	34	.17	.16
Plow, one-way	: 8-foot	1.5	.38	.37	49	.28	.27
Disk, single	: 15-foot	1.2	.25	.24	7	.02	.02
Disk, tandem	: 10-foot	1.2	.35	.34	20	.08	.08
Fertilize, spreader	: ---	1.0	.48	.42	7	.03	.03
Harrow, spiketooth	: 24-foot	1.7	.15	.14	64	.17	.15
Harrow, springtooth	: 12-foot	1.7	.34	.32	75	.44	.40
Seed, drill	: 10-foot	1.0	.38	.35	100	.38	.35
Spray	: 12-foot	1.0	.24	.21	6	.01	.01
Spray, contract	: ---	1.0	---	---	3	---	---
Total preharvest	:					2.01	1.86
Combine	: 12-foot	1.0	.41	.38	58	.24	.22
Combine, self-propelled:	12-foot	1.0	.39	.36	16	.06	---
Combine, self-propelled:	14-foot	1.0	.36	.33	26	.09	---
Haul, truck	: 1½-ton	1.0	.32	.32	100	.32	---
Total harvest	:					.71	.22
Total 1/	:					2.72	2.08

1/ In addition, self-propelled combines averaged 0.15 hour an acre and truck use 0.32 hour an acre.

WHEAT, WINTER: RESOURCES USED IN PRODUCTION, AREA V-A1, 1949

The data presented here are taken from a survey made in 1950 by the Department of Agricultural Economics of the University of Nebraska of approximately 98 farms producing winter wheat in southeastern Nebraska. These farms are located in type-of-farming area V-A1, a cattle feeding and hog area.

In 1949, 40 acres of winter wheat were harvested per farm. The average yield of winter wheat was approximately 15 bushels per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The drawbar-horsepower rating of these tractors ranged from 10 to 27; the most common was 19.

Materials used and contract work hired, 1949

MATERIALS USED

Item	: Unit	: Quantity: per acre	: Price : per unit	: Cost : per acre	: Average : Acreage: covered	: cost per acre
		: Number	Dollars	Dollars	Percent	Dollars
Seed	: Bu.	: 1.4	2.35	3.29	100	3.29
Twine	: Lb.	: 3.5	.25	.88	5	.04
Total materials	:	:				3.33

CONTRACT WORK HIRED

Combining	: Acre	: 1.0	4.65	4.65	22	1.02
Hauling	: Bu.	: 15	.03	.45	21	.09
Total contract work	:	:				1.11

Man labor, power, and machinery used by operation in producing and harvesting winter wheat, area V-A1, southeastern Nebraska, 1949

Operation	Size	Time per acre:			Average time per		
	of	Times:	once over		Acreage:acre - all farms		
	equipment:	over	Man	Power	covered:	Man	Tractor
	No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.	
Plow, moldboard	:3-14 inch	1.0	0.91	0.87	22	0.20	0.19
Plow, moldboard	:2-14 inch	1.0	1.38	1.31	67	.92	.88
Disk, tandem	:10-foot	1.2	.47	.45	16	.09	.09
Disk, single	:12-foot	2.0	.33	.33	80	.53	.51
Harrow, spiketooth	:18-foot	1.7	.20	.19	77	.26	.25
Seed, drill	:10-foot	1.0	.53	.48	100	.53	.48
Total preharvest	:					2.53	2.40
Windrow	: 8-foot	1.0	.68	.65	6	.04	.04
Combine	: 6-foot	1.0	.98	.90	73	.72	.66
Combine, contract	: 6-foot	1.0	.98	.90	22	.22	.20
Haul from combine, t.	:1½-ton	1.0	.27	.26	74	.20	---
Haul, truck, contract	:1½-ton	1.0	.27	.26	21	.06	---
Bind	: 8-foot	1.0	.70	.64	5	.04	.03
Shock by hand	: ---	1.0	1.17	---	5	.06	---
Haul bundles	: ---	1.0	1.57	.50	3	.05	.02
Haul bundles, horses	: ---	1.0	2.17	.91	2	.04	---
Thresh	:24-inch	1.0	.54	.50	5	.03	.02
Total harvest	:					1.46	.97
Total 1/	:					3.99	3.37

1/ In addition, horse work averaged 0.02 hour an acre and truck use 0.24.

WHEAT, WINTER (CONTINUOUS CROPPING): RESOURCES USED IN
PRODUCTION, AREA V-F2, 1950

The data presented here are based on a survey made in 1951 of 36 farms producing wheat on land that had been in crops the previous year. These farms are located in type-of-farming area V-F2, a live-stock and cash grain producing area in north central Kansas and south central Nebraska.

The farms surveyed averaged about 460 acres per farm. Cropland comprised about 321 acres. In 1950, 144 acres were in wheat, and the yield averaged slightly more than 15 bushels per acre.

Tractors and motorized equipment provide all of the power used in producing wheat on these farms. The drawbar-horsepower rating of tractors ranged from 14 to 69; the most common was about 23.

Materials used and contract work hired, 1950

MATERIALS USED

Item	: Unit	: Quantity : per acre	Price : per unit	Cost : per acre	: Average Acreage : covered	: cost per acre
		: Number	Dollars	Dollars	Percent	Dollars
Seed ^{1/}	: Bu.	: 1.0	2.10	2.10	100	2.10
Total materials	:	:				2.10

CONTRACT WORK HIRED

Combining	: Acre	: 1.0	3.35	3.35	24	.80
Hauling	: Bu.	: 15.0	.05	.75	16	.12
Total contract work	:	:				.92

^{1/} Approximately 13 percent of the farmers in this area used purchased seed wheat.

Man labor, power, and machinery used by operation in producing and harvesting winter wheat, continuous cropping, area V-F2, north central Kansas and south central Nebraska, 1950

Operation	: Size :	:Time per acre:			:Average time per		
	: of :	:Times:	once over		:Acreage:	acre - all farms	
	:equipment:	over :	Man	Power	:covered:	Man	: Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Plow, moldboard	:2-16 inch	1.0	0.90	0.86	10	0.09	0.09
Plow, moldboard	:3-14 inch	1.0	.69	.66	48	.33	.32
Plow, moldboard	:4-14 inch	1.0	.45	.43	30	.14	.13
Plow, one-way	: 8-foot	1.2	.38	.37	38	.17	.17
Plow, Graham	: 8-foot	1.0	.35	.34	5	.02	.02
Disk, single	:15-foot	1.7	.25	.24	26	.11	.11
Disk, single	:20-foot	1.6	.16	.16	14	.04	.04
Weed, rod weeder	:12-foot	1.2	.24	.23	19	.06	.05
Harrow, springtooth	:12-foot	1.6	.29	.26	43	.20	.18
Harrow, spiketooth	:18-foot	1.4	.24	.22	26	.09	.08
Harrow, spiketooth	:24-foot	1.5	.15	.14	30	.07	.06
Seed, drill	:10-foot	1.0	.38	.35	49	.19	.17
Seed, drill	:13-foot	1.0	.29	.26	51	.15	.13
Total preharvest	:	:	:	:	:	1.66	1.55
Combine	: 6-foot	1.0	.75	.69	18	.14	.12
Combine	:12-foot	1.0	.45	.41	46	.21	.19
Combine, self-propelled	:14-foot	1.0	.42	.32	12	.05	---
Combine, s.p., contract	:14-foot	1.0	.42	.32	24	.10	---
Haul grain, truck	:1½-ton	1.0	.38	.38	84	.32	---
Haul truck, contract	:1½-ton	1.0	.38	.38	16	.06	---
Total harvest	:	:	:	:	:	.88	.31
Total 1/	:	:	:	:	:	2.54	1.86

1/ In addition, self-propelled combines averaged 0.12 hour an acre and truck use 0.38 hour an acre.

WHEAT, WINTER: RESOURCES USED IN PRODUCTION, AREA V-G1, 1949

The data presented here are based on a survey of approximately 41 farms growing wheat in 1950, in western Missouri and eastern Kansas. These farms are located in type-of-farming area V-G1, a livestock, cash-grain, and dairy area.

The farms surveyed averaged 354 total acres. In 1949, 235 acres were in crops, including 59 in wheat. The average yield of wheat was 23 bushels an acre.

Tractors provide most of the power on these farms. They were used for operations listed below unless otherwise indicated. The D.B.H.P. rating of these tractors ranged from 13 to 26; the most common was 21.

Materials used and contract work hired, 1949

MATERIALS USED

Item	: Unit	: Quantity : per acre	: Price : per unit	: Cost : per acre	: Average : Acreage covered	: cost per acre
		: Number	Dollars	Dollars	Percent	Dollars
Seed <u>1/</u>	: Bu.	: 1.4	1.90	2.66	100	2.66
Manure	: Ton	: 5	<u>2/</u> 2.00	10.00	6	.60
Mixed fertilizer	: Cwt.	: 1.50	2.25	3.38	61	2.06
Nitrate fertilizer	: Cwt.	: 1.20	3.55	4.26	16	.68
Phosphate fertilizer	: Cwt.	: .90	3.40	3.06	14	.43
Total materials	:	:				<u>6.43</u>

CONTRACT WORK HIRED

Spraying	: Acre	: 1.0	2.00	2.00	6	.12
Combining	: Acre	: 1.0	3.55	3.55	15	<u>.53</u>
Total contract work	:	:				.65

1/ Approximately 22 percent of the farmers in this area purchased seed wheat.

2/ Estimated.

Man labor, power, and machinery used by operation in producing and
harvesting winter wheat, area V-G1, western Missouri and
eastern Kansas, 1949

Operation	: Size :	:Time per acre:			:Average time per		
	: of :	:Times:	once over		Acreage:acre - all farms		
	:equipment:over :	Man	Power	covered:	Man	Tractor	
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Apply manure, spreaders	:60-bu.	1.0	3.01	1.00	6	0.18	0.06
Plow, moldboard	:2-14 inch	1.0	1.17	1.11	87	1.02	.97
Disk, tandem	: 7-foot	1.9	.44	.42	80	.67	.64
Disk, single	:15-foot	1.9	.20	.19	11	.04	.04
Harrow, spiketooth	:15-foot	1.9	.22	.20	86	.36	.33
Disk and harrow	: 7-foot	1.7	.49	.47	11	.09	.09
Field, cultivate	:10-foot	1.2	.31	.30	8	.03	.03
Fertilize, drill	: 9-foot	1.0	.44	.41	14	.06	.06
Seed, drill	:11-foot	1.0	.42	.40	100	.42	.40
Spray, contract,airplane:	---	1.0	---	---	6	---	---
Total preharvest	:					2.87	2.62
Combine	: 6-foot	1.0	.81	.66	71	.58	.47
Combine, self-propelled	:14-foot	1.0	.59	.59	14	.08	---
Combine, contract	: 6-foot	1.0	.76	.54	15	.11	.08
Haul from combine, truck:	1½-ton	1.0	.66	.66	100	.66	---
Total harvest	:					1.43	.55
Total 1/	:					4.30	3.17

1/ In addition, truck use averaged 0.66 hour an acre and self-propelled combine use averaged 0.08 hour an acre.

WHEAT, WINTER: RESOURCES USED IN PRODUCTION, AREA VI-E1, 1949

The data presented here are based on a survey in 1950 of 30 farms producing wheat in central Texas. These farms are located in type-of-farming area VI-E1, a livestock and cash grain area in the Grand Prairie of Texas.

The farms surveyed averaged 391 acres per farm. Cropland comprised 187 acres. In 1949, 47 acres were in wheat and the yield averaged 10 bushels per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The drawbar-horsepower rating of these tractors ranged from 12 to 27; the most common was about 18.

Materials used and contract work hired, 1949

MATERIALS USED

Item	: Unit	: Quantity : per acre	: Price : per unit	: Cost : per acre	: Average : Acreage : covered	: cost : per acre
		: Number	Dollars	Dollars	Percent	Dollars
Seed ¹ / ₂	: Bu.	: 1.2	2.40	2.88	100	2.88
Superphosphate fertilizer	: Cwt.	: 1.80	1.55	2.79	7	.20
Twine	: Lb.	: 1.5	.25	.38	14	.05
Sacks	: No.	: 5.3	.19	1.01	35	.35
Total materials						3.48

CONTRACT WORK HIRED

Combining	: Acre	: 1.0	3.00	3.00	25	.75
Hauling	: Bu.	: 10	.08	.80	15	.12
Total contract work						.87

¹/₂ Approximately 57 percent of the farmers in this area purchased seed wheat.

Man labor, power, and machinery used by operation in producing and harvesting winter wheat, area VI-E1, central Texas, 1949

Operation	Size	Time per acre:			Average time per		
	of	Times:	once over		Acreage:	acre - all farms	
	equipment:	over	Man	Power	covered:	Man	Tractor
	No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.	
Plow, disk	4-disk	1.4	1.23	1.07	82	1.41	1.23
Plow, one-way	5-foot	1.7	.79	.68	36	.48	.42
Disk, tandem	6-foot	1.2	.45	.39	53	.29	.25
Disk, tandem, horses	5-foot	1.0	1.64	6.29	4	.07	---
Disk, single	15-foot	1.8	.29	.27	15	.08	.07
Harrow, spiketooth	12-foot	1.5	.23	.20	60	.20	.18
Seed, drill	10-foot	1.0	.47	.42	100	.47	.42
Total preharvest						3.00	2.57
Combine	6 foot	1.0	1.21	.62	61	.74	.38
Combine, contract	6-foot	1.0	1.00	.57	25	.57	.25
Bind	10-foot	1.0	.55	.52	14	.08	.07
Shock by hand	---	1.0	.79	---	14	.11	---
Haul bundles	---	1.0	1.63	.30	14	.23	.04
Thresh	---	1.0	1.18	.52	14	.17	.07
Haul grain, truck	---	1.0	.20	.13	76	.15	---
Haul to town, truck	---	1.0	.25	.16	9	.02	---
Haul to town, t.,contract:	---	1.0	.25	.16	15	.04	---
Total harvest						2.11	.81
Total 1/						5.11	3.38

1/ In addition, horse work averaged 0.25 hour an acre and truck use 0.13 hour an acre.

WHEAT, WINTER: RESOURCES USED IN PRODUCTION, AREA VI-E2, 1950

The data presented here are based on a survey in 1950 of 46 farms that produced wheat. These farms are located in type-of-farming area VI-E2, a general farming area in southeastern Kansas and northeastern Oklahoma.

The farms surveyed averaged 276 total acres. In 1950, 146 acres were in crops, including 52 acres in winter wheat. The yield of wheat averaged about 20 bushels per acre.

Tractors and motorized equipment provide all the power used in producing wheat. The drawbar-horsepower rating of these tractors ranged from 10 to 25; the most common was about 19.

Materials used and contract work hired, 1950

MATERIALS USED

Item	: Unit	: Quantity: per	Price : per	Cost : per	: Average	
		: acre	: unit	: acre	: Acreage: cost	
		: Number	Dollars	Dollars	Percent	Dollars
Seed ^{1/}	: Bu.	: 1.4	2.30	3.22	100	3.22
Fertilizer (4-12-4)	: Cwt.	: 1.20	2.15	2.58	74	1.91
Phosphate fertilizer	: Cwt.	: 1.15	1.75	2.01	13	.26
Total materials	:	:				5.39

CONTRACT WORK HIRED

Combining	: Acre:	1.0	3.25	3.25	13	.42
Total contract work:	:	:				.42
	:	:				

^{1/} Approximately 14 percent of the farmers in this area purchased seed wheat.

Man labor, power, and machinery used by operation in producing and harvesting winter wheat, area VI-E2, southeastern Kansas and northeastern Oklahoma, 1950

Operation	: Size	:	:Time per acre:			:Average time per	
	: of	:	:Times:	once over	:Acreage:	acre - all farms	
	:equipment:	over	: Man	: Power	:covered:	Man	: Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Plow, moldboard	:2-14 inch	1.0	1.26	1.21	93	1.17	1.13
Disk, tandem	: 7-foot	2.3	.53	.51	70	.85	.82
Disk, single	:10-foot	2.4	.33	.32	31	.24	.24
Harrow, spiketooth	:12-foot	1.8	.32	.30	73	.42	.39
Harrow, springtooth	: 9-foot	1.8	.38	.35	19	.13	.12
Seed, drill	: 9-foot	1.0	.49	.47	100	.49	.47
Total preharvest	:					3.30	3.17
Windrow	: 8-foot	1.0	.96	.53	5	.05	.03
Combine	: 6-foot	1.0	.94	.70	55	.52	.38
Combine, s.p.	:12-foot	1.0	.29	.28	32	.09	---
Combine, s.p., c.	:12-foot	1.0	.29	.28	13	.04	---
Haul from combine, t.	:1½-ton	1.0	.58	.58	100	.58	---
Total harvest	:					1.28	.41
Total 1/	:					4.58	3.58

1/ In addition, self-propelled combines averaged 0.13 hour an acre and truck use 0.58 hour an acre.

WHEAT, WINTER: RESOURCES USED IN PRODUCTION, AREA VII-A2, 1949

Data presented here are based on a survey in 1950 of 19 farms producing winter wheat in east central Texas. These farms are located in type-of-farming area VII-A2, a specialized cotton area in the Black Waxy Prairie.

The farms surveyed averaged 428 acres. In 1949, 311 acres were in crops, including 105 acres in winter wheat. The yield of winter wheat averaged about 11 bushels per acre.

Tractors and motorized equipment provided all of the power used in producing wheat on these farms. The drawbar-horsepower rating of tractors ranged from 13 to 28; the most common was about 18.

Materials used and contract work hired, 1949

MATERIALS USED

Item	: Unit	: Quantity : per acre	: Price : per unit	: Cost : per acre	: Average : Acreage covered	: cost : per acre
		: Number	Dollars	Dollars	Percent	Dollars
Seed ^{1/}	: Bu.	: 1.2	2.80	3.36	100	3.36
Nitrate fertilizer	: Cwt.	: 1.00	3.75	3.75	7	.26
Sacks	: No.	: 9	.16	1.44	5	.07
Total materials	:	:				3.69

CONTRACT WORK HIRED

Combining	: Acre	: 1.0	3.50	3.50	12	.42
Hauling	: Bu.	: 11.0	.08	.88	17	.15
Total contract work	:	:				.57

^{1/} Approximately 42 percent of the farmers in this area purchased seed wheat.

Man labor, power, and machinery used by operation in producing and harvesting winter wheat, area VII-A2, east central Texas, 1949

Operation	Size	Time per acre:			Average time per		
	of	Times:	once over		Acreage:acre - all farms		
	equipment:	over	Man	Power:	covered:	Man	Tractor
	No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.	
Plow, one-way	6-foot	1.6	0.73	0.69	62	0.73	0.68
Plow, disk	5-disk	1.0	1.33	.75	44	.59	.33
Plow, moldboard	2-14 inch	1.3	1.21	1.16	8	.12	.12
Disk, tandem	10-foot	1.0	.47	.45	37	.17	.17
Harrow, spiketooth	12-foot	1.4	.25	.23	60	.21	.19
Harrow, springtooth	9-foot	1.0	.82	.75	22	.18	.16
Seed, drill	10-foot	1.0	.46	.42	100	.46	.42
Total preharvest	:	:	:	:	:	2.46	2.07
Combine	6-foot	1.0	1.08	.62	41	.44	.25
Combine, self-propelled	12-foot	1.0	.29	.26	47	.14	---
Combine, contract	6-foot	1.0	.90	.55	12	.11	.07
Haul to barn, truck	---	1.0	.09	.07	15	.01	---
Haul to market, truck	---	1.0	.17	.12	68	.12	---
Haul to market, contract, t.	---	1.0	.13	.13	17	.02	---
Total harvest	:	:	:	:	:	.84	.32
Total 1/	:	:	:	:	:	3.30	2.39

1/ In addition, truck use averaged 0.11 hour an acre and self-propelled combine 0.12 hour an acre.

WHEAT, WINTER: RESOURCES USED IN PRODUCTION, AREA VII-G2, 1949

The data presented here are based on a survey in 1950 of 29 farms producing wheat in central Oklahoma. These farms are located in type-of-farming area VII-G2, a cotton and wheat producing area in the Mixed Prairies and Cross Timbers section of Oklahoma.

The farms surveyed averaged 354 acres per farm. In 1949, 153 acres were in crops, including 56 acres in wheat. The yield of wheat averaged 16 bushels per acre.

Tractors and motorized equipment provide all of the power used in producing wheat. The drawbar-horsepower rating of tractors on these farms ranged from 12 to 27; the most common was about 17.

Materials used and contract work hired, 1949

MATERIALS USED

Item	: Unit	: Quantity : : per	Price : : per	Cost : : per	: Average : Acreage : : covered :	per acre cost
		: acre : : unit	: unit : Dollars	: acre : Dollars	Percent	Dollars
Seed <u>1</u> /	: Bu.	: 1.3	2.20	2.86	100	2.86
Superphosphate fertilizer	: Cwt.	: 1.70	1.60	2.72	16	.44
Nitrate fertilizer	: Cwt.	: .80	3.90	3.12	6	.19
Total materials	:	:				3.49

CONTRACT WORK HIRED

Combining	: Acre	: 1.0	3.50	3.50	15	.52
Hauling	: Bu.	: .16	.04	.64	7	.04
Total contract work	:	:				.56

1/ Approximately 14 percent of the farmers in this area purchased seed wheat.

Man labor, power, and machinery used by operation in producing and harvesting winter wheat, area VII-G2, central Oklahoma, 1949

Operation	: Size :	:Time per acre:			:Average time per		
	: of :	:Times:	:once over		:Acreage:	:acre - all farms	
	:equipment:	:over :	Man	Power	:covered:	Man	:Tractor
		<u>No.</u>	<u>Hrs.</u>	<u>Hrs.</u>	<u>Pct.</u>	<u>Hrs.</u>	<u>Hrs.</u>
Plow, moldboard	:2-14 inch	1.0	1.10	1.05	61	0.67	0.64
Plow, one-way	: 6-foot	1.0	.53	.50	34	.18	.17
Plow, disk	: 3-disk	1.0	1.06	1.01	25	.26	.25
Disk, tandem	: 7-foot	1.3	.46	.44	70	.42	.40
Harrow, spiketooth	:12-foot	1.4	.31	.28	59	.25	.23
Harrow, springtooth	: 7-foot	2.0	.38	.35	28	.21	.20
Seed, drill	:10-foot	1.0	.44	.40	100	.44	.40
Total preharvest	:					2.43	2.29
Windrow	:10-foot	1.0	.74	.70	4	.03	.03
Combine	: 6-foot	1.0	.70	.60	82	.57	.49
Combine, contract	: 6-foot	1.0	.49	.41	15	.07	.06
Bind	:10-foot	1.0	.57	.42	3	.02	.01
Shock by hand	: ---	1.0	1.42	---	3	.04	---
Haul bundles	: ---	1.0	1.08	.58	3	.03	.02
Thresh	: ---	1.0	.92	.41	3	.02	.01
Haul to barn	: ---	1.0	.26	.18	11	.03	.02
Haul to barn, truck	: ---	1.0	.22	.17	40	.09	---
Haul to town, truck	: ---	1.0	.09	.09	42	.04	---
Haul to town, truck, c.	: ---	1.0	.09	.09	7	.01	---
Total harvest	:					.95	.64
Total <u>1/</u>	:					3.38	2.93

1/ In addition, truck use averaged 0.12 hour an acre.

WHEAT, WINTER (SUMMER FALLOW): RESOURCES USED IN
PRODUCTION, AREA III-A⁴, 1952

The data presented here are based on a survey made in 1952 of 55 farms producing winter wheat in type-of-farming area III-A⁴. This is a wheat and small grain area in the central plains along the Platte and Laramie Rivers in southeastern Wyoming, southwestern Nebraska, and northeastern Colorado. The farms are comparatively large, and wheat growing is the dominant enterprise. Most of the wheat is grown on fallowed ground.

The farms surveyed averaged 1,250 acres per farm. Cropland comprised about 830 acres. In 1952, 400 acres were in wheat and the yield averaged approximately 26 bushels per acre.

Tractors provide most of the power used on these farms. They were used for operations listed below unless otherwise indicated. The drawbar-horsepower rating of the tractors ranged from 24 to 36; the most common was about 34.

Materials used and contract work hired, 1952

MATERIALS USED

Item	: Unit	: Quantity: per acre	: Price : per unit	: Cost : per acre	: Average : Acres covered	: cost per acre
		: Number	: Dollars	: Dollars	: Percent	: Dollars
Seed	: Bu.	: 0.7	: 1.90	: 1.33	: 100	: 1.33
Spray, (2,4-D)	: Pt.	: 1.0	: .56	: .56	: 4	: .02
Total materials						1.35

CONTRACT WORK HIRED

Fertilizing (82-0-0) <u>1</u> /	: Acre	: 1.0	: 6.00	: 6.00	: 1	: .06
Cleaning seed	: Bu.	: .7	: .11	: .08	: 15	: .01
Combining	: Acre	: 1.0	: 3.50	: 3.50	: 4	: .14
Trucking	: Bu.	: 26	: .05	: 1.30	: 5	: .06
Total contract work						.27

1/ Approximately 40 units were applied.

Man labor, power, and machinery used by operation in producing and harvesting winter wheat, summer fallow, area III-A4, southeastern Wyoming, southwestern Nebraska, and northeastern Colorado, 1952

Operation	: Size : : of : : equipment:	: Times: : over :	:Time per acre:			:Average time per	
			Man	Power	Acreage:	Man	Tractor
		No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.
Plow, moldboard	:5-16 inch	1.0	0.45	0.44	32	0.14	0.14
Plow, moldboard	:4-16 inch	1.0	.56	.54	32	.18	.17
Plow, moldboard	:3-16 inch	1.0	.70	.67	16	.11	.11
Plow, wheatland	:10-foot	1.2	.30	.28	60	.22	.20
Plow, Graham	:12-foot	1.5	.25	.24	42	.16	.15
Disk, tandem	:10-foot	1.0	.13	.12	15	.02	.02
Harrow, springtooth	:12-foot	1.6	.28	.25	82	.37	.33
Weed, rod weeder	:12-foot	1.5	.26	.24	64	.25	.23
Weed, rod weeder	:24-foot	2.0	.13	.12	34	.09	.08
Seed, drill	:14-foot	1.0	.30	.27	100	.30	.27
Spray	:30-foot	1.0	.26	.24	4	.01	.01
Total preharvest	:					1.85	1.71
Combine, self-propelled	:12-foot	1.0	.40	.37	25	.32	---
Combine	:12-foot	1.0	.51	.44	17	.09	.07
Combine, s.p., contract	:12-foot	1.0	.40	.37	4	.02	---
Truck	:1½-ton	1.0	.34	.38	95	.32	---
Truck, contract	:1½-ton	1.0	.34	.38	5	.02	---
Total harvest	:					.77	.07
Total 1/	:					2.62	1.78

1/ In addition, truck use averaged 0.38 hour an acre and self-propelled combines 0.30 hour an acre.

WHEAT, WINTER (SUMMER FALLOW): RESOURCES USED IN PRODUCTION,
AREA III-D1, 1948

The data presented here are based on a survey of 164 farms in 1949. About 70 of these farms harvested wheat in 1948 from land that had been fallow in the summer of 1947. These farms are located in the High Plains of the Panhandle of Texas and Oklahoma and in southwestern Kansas. Crop production, primarily wheat and grain-sorghum, is the most important enterprise on these farms.

The farms surveyed averaged 719 total acres. In 1948, about 595 acres were in cropland, including 90 acres of fallow. About 283 acres of wheat were harvested, of which 72 acres had been seeded on fallow. Wheat failure on fallow was only about 4 percent of the planted acreage. The average yield of wheat was 21 bushels per harvested acre.

These farms are highly mechanized, and tractors and motorized equipment provide all the power used in the production of wheat. The drawbar-horsepower rating of the tractors ranged from 11 to 36; the most common was about 23.

Materials used and contract work hired, 1948

MATERIALS USED

Item	: Unit	: Quantity: per acre	: Price : per unit	: Cost : per acre	: Average : Acreage: covered	: cost per acre
		: Number	Dollars	Dollars	Percent	Dollars
Home-grown seed	: Bu.	: 0.57	2.45	1.40	54	0.76
Purchased seed	: Bu.	: .57	3.20	1.82	46	.84
Total materials	:	:				1.60

CONTRACT WORK HIRED

Seed cleaning	: Bu.	: .57	.06	.03	48	.01
Combining	: Acre	: 1.0	2.90	2.90	26	.75
Hauling	: Bu.	: 21	.06	1.26	33	.42
Total contract work	:	:				1.18

Man labor, power, and machinery used by operation in producing and
harvesting winter wheat, summer fallow, area III-D1,
southwestern Kansas and the Panhandle of
Oklahoma and Texas, 1948

Operation	Size	Time per acre:			Average time per		
	of	Times:	once over		Acreage:	acre - all farms	
	equipment:	over	Man	Power	covered:	Man	Tractor
	No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.	
Plow, one-way	:12-foot	3.7	0.21	0.20	93	0.72	0.69
Plow, chisel	:16-foot	1.9	.21	.20	33	.13	.12
Rod weed	:16-foot	1.4	.19	.18	31	.08	.08
Seed, drill	:14-foot	1.0	.21	.20	100	.21	.20
Total preharvest	:					1.14	1.09
Combine	:12-foot	1.0	.53	.27	74	.39	.20
Combine, contract	:12-foot	1.0	.53	.27	26	.14	.07
Haul grain, truck	:1½-ton	1.0	.20	.17	67	.13	---
Haul grain, contract, t.	:1½-ton	1.0	.20	.17	33	.07	---
Total harvest	:					.73	.27
Total <u>1/</u>	:					1.87	1.36

1/ In addition, truck use averaged 0.17 hour an acre.

WHEAT, WINTER (SUMMER FALLOW): RESOURCES USED IN PRODUCTION,
AREA V-F2, 1950

The data presented here are based on a survey made in 1951 of 22 farms producing wheat on land that was fallowed in the summer of 1949. These farms are located in type-of-farming area V-F2, a livestock and cash grain producing area in north central Kansas and south central Nebraska.

The farms surveyed averaged 654 acres per farm. Cropland comprised about 437 acres. In 1950, 168 acres were in wheat, and the yield averaged slightly over 19 bushels per acre.

Tractors and motorized equipment provide all of the power used in producing wheat on these farms. The drawbar-horsepower rating of tractors ranged from 11 to 69; the most common was about 25.

Materials used and contract work hired, 1950

MATERIALS USED

Item	: Unit	: Quantity per acre	: Price per unit	: Cost per acre	: Average Acreage covered	: Average cost per acre
		: Number	Dollars	Dollars	Percent	Dollars
Seed	: Bu.	: 0.9	2.00	1.80	100	1.80
Nitrate fertilizer	: Cwt.	: .75	4.00	3.00	3	.09
Ceresan	: Bu.	: .9	.06	.05	17	.01
Total materials	:	:				1.90

CONTRACT WORK HIRED

Combining	: Acre	: 1.0	3.00	3.00	6	.18
Total contract work	:	:				.18
	:	:				

Man labor, power, and machinery used by operation in producing
and harvesting winter wheat, summer fallow, area V-F2,
north central Kansas and south central
Nebraska, 1950

Operation	Size	Time per acre:			Average time per		
	of	Times:	once over		Acreage:	acre - all farms	
	equipment:	over	Man	Power	covered:	Man	Tractor
	No.	Hrs.	Hrs.	Pct.	Hrs.	Hrs.	
Plow, moldboard	: 3-14 inch	1.0	0.69	0.66	16	0.11	0.11
Plow, one-way	: 7-foot	2.0	.44	.42	30	.26	.25
Plow, one-way	: 9-foot	1.7	.33	.32	18	.10	.10
Plow, Graham	: 12-foot	1.9	.28	.26	63	.33	.31
Disk, single	: 15-foot	1.7	.25	.24	18	.08	.07
Disk, tandem	: 8-foot	2.0	.38	.37	16	.12	.12
Weed, rod weeder	: 12-foot	1.1	.28	.25	78	.24	.22
Harrow, springtooth	: 12-foot	1.8	.26	.24	39	.18	.17
Harrow, spiketooth	: 20-foot	1.4	.17	.16	25	.06	.06
Seed, drill	: 10-foot	1.0	.38	.35	27	.10	.09
Seed, drill	: 12-foot	1.0	.32	.29	39	.12	.11
Seed, drill	: 16-foot	1.0	.24	.22	34	.08	.07
Total preharvest	:					1.78	1.68
Combine	: 6-foot	1.0	.70	.64	15	.10	.10
Combine	: 12-foot	1.0	.45	.41	46	.21	.19
Combine, contract	: 12-foot	1.0	.45	.41	6	.03	.02
Combine, s.p.	: 12-foot	1.0	.45	.41	33	.15	---
Haul grain, truck	: 1½-ton	1.0	.36	.36	100	.36	---
Total harvest	:					.85	.31
Total 1/	:					2.63	1.99

1/ In addition, self-propelled combines averaged 0.14 hour an acre and truck use 0.36 hour an acre.

State Groupings by Type-of-Farming Regions
for Release of Crop Production Practice Data

Section 1

Northeast

Maine
New Hampshire
Vermont
Massachusetts

Rhode Island
Connecticut
New York
New Jersey

Pennsylvania
Delaware
Maryland

Section 2

Lake States

Michigan
Wisconsin
Minnesota

Corn Belt

Ohio
Indiana
Illinois

Iowa
Missouri

Section 3

Appalachian

Virginia
West Virginia
North Carolina
Kentucky
Tennessee

Southeast

South Carolina
Georgia
Florida
Alabama

Mississippi Delta

Mississippi
Arkansas
Louisiana

Section 4

Southern Plains

Oklahoma
Texas

Northern Plains

North Dakota
South Dakota

Nebraska
Kansas

Section 5

Mountain

Montana
Idaho
Wyoming

Colorado
New Mexico
Arizona

Utah
Nevada

Pacific

Washington
Oregon
California

Crops and Type-of-Farming Areas for which Cropping-Practice Data
are Available in Section 1

Northeast

Crop	Type-of- farming	Crop	Type-of- farming
area	year	area	year
Alfalfa:	IV-F4 : 1949:	Corn, sweet:	I-C1 :
	IV-F6 : :	(N.J.)	: 1949
	(Pa.) : 1949:		:
	:	Cucumbers:	I-C1 :
Asparagus:	:	(Md.)	: 1949
Fresh market....	I-C1 : :		:
	(N.J.) : 1949:		:
Processing.....	I-C1 : :	Oats:	IV-F3 : 1949
	(N.J.) : 1949:		IV-F4 : 1949
	:		IV-F6 :
Barley:	I-C1 : 1949:		(Pa.) : 1949
	IV-F3 : 1949:		:
	IV-F6 : :	Peas:	:
	(Pa.) : 1949:	Processing	I-C1 : 1949
	:		:
Beans, lima:	:	Potatoes:	IV-F6 :
Fresh market....	I-C1 : :	(Pa.)	: 1949
	(N.J.) : 1949:		:
Processing	I-C1 : :	Soybeans:	I-C1 : 1949
	(N.J.) : 1949:		IV-F3 : 1949
	:		:
Cantaloupe:	I-C1 : :	Sweetpotatoes:	I-C1 : 1949
	(Md.) : 1949:		:
	:	Tobacco:	:
Clover hay:	IV-F4 : 1949:	Type 32.....	VIII-D1 : 1949
	IV-F6 : :	Type 41.....	IV-F3 :
	(Pa.) : 1949:		(Pa.) : 1949
	:		:
Corn, grain:	I-C1 : 1949:	Tomatoes:	:
	IV-F3 : 1949:	Fresh market...	I-C1 :
	IV-F4 : 1949:		(N.J.) : 1949
	IV-F6 : :	Processing.....	I-C1 :
	(Pa.) : 1949:		(Md.) : 1949
	:		:
Corn, silage:	I-C1 : :		:
	(N.J.) : 1949:	Wheat, winter:	I-C1 : 1949
	IV-F4 : 1949:		IV-F3 : 1949
	IV-F6 : :		IV-F4 : 1949
	(Pa.) : 1949:		IV-F6 : 1949
	:		:

Crops and Type-of-Farming Areas for which Cropping-Practice Data
are Available in Section 2

Lake States and Corn Belt

Crop	Type-of- farming area	Crop: year:	Crop	Type-of- farming area	Crop year
Alfalfa:	I-B5	:1950:	Corn, silage:	I-B5	:1950
	IV-D1	:1949:		IV-A2	:1950
	IV-F1	:1950:		IV-B2	:1950
	IV-F4	:1949:		IV-D1	:1949
	VI-H3	: :		IV-F1	:1950
	(Ohio)	:1949:		IV-F4	:1949
		: :		V-D1	:1949
Barley:	III-E2	:1950:		V-F4	:1949
	IV-A2	:1950:		V-H2	:1950
	IV-B2	:1950:		VI-H3	:
	IV-D1	:1949:		(Ohio)	:1949
	IV-F1	:1950:			:
	V-A1	:1949:	Corn, sweet:		:
	V-F4	:1949:	(fresh market)	IV-A2	:1950
		: :			:
Beans, dry:	IV-D1	:1949:	Corn, sweet:		:
		: :	(processing)	IV-A2	:1950
		: :		IV-B2	:1950
Clover, hay:	I-B5	:1950:			:
	IV-D1	:1949:			:
	IV-F1	:1950:	Flax:	IV-A2	:1950
	IV-F4	:1949:		IV-B1	:1950
	VI-H3	: :		IV-B2	:1950
	(Ohio)	:1949:		V-A1	:1949
		: :		V-F4	:1949
Corn, grain:	I-B5	:1950:			:
	IV-A2	:1950:	Grain sorghum:	V-A1	:1949
	IV-B1	:1950:		V-G1	:1949
	IV-B2	:1950:			:
	IV-D1	:1949:	Oats:	I-B5	:1950
	IV-F1	:1950:		III-E2	:1950
	IV-F4	:1949:		IV-A2	:1950
	V-A1	:1949:		IV-B1	:1950
	V-A1	: :		IV-B2	:1950
	(Nebr.)	:1948:		IV-D1	:1949
	V-B1	:1947:		IV-F1	:1950
	V-B2	: :		IV-F4	:1949
	(Ill.)	:1947:		V-A1	:1949
	V-D1	:1949:		V-B1	:1947
	V-F4	:1949:		V-B2	:
	V-G1	:1949:		(Ill.)	:1947
	V-H1	:1950:		V-D1	:1949
	V-H2	:1950:		V-F4	:1949
	VI-G2	:1950:		V-G1	:1949
	VI-G3	:1950:		V-H1	:1950
	VI-H3	: :		V-H2	:1950
	(Ohio)	:1949:		VI-G2	:1950
		: :		VI-G3	:1950

-Continued

Crops and Type-of-Farming Areas for which Cropping-Practice Data
are Available in Section 2 - Continued

Lake States and Corn Belt

Crop	Type-of- farming area	Crop: year:	Crop	Type-of- farming area	Crop year
Peas:					
(processing)	IV-A2	:1950:	Wheat, spring:	IV-A2	:1950
	IV-F1	:1950:		IV-B1	:1950
				IV-B2	:1950
Red clover seed:	I-B5	:1950:		V-F4	:1949
Rye:	III-E2	:1950:			
	IV-B1	:1950:	Wheat, winter:	I-A6	
				(Mo.)	:1950
Soybeans:	IV-B1	:1950:		I-B5	:1950
	IV-B2	:1950:		IV-B1	:1950
	IV-D1	:1949:		IV-B2	:1950
	V-A1	:1949:		IV-D1	:1949
	V-B1	:1947:		IV-F4	:1949
	V-B2	:		V-A1	:
	(Ill.)	:1947:		(Nebr.)	:1949
	V-D1	:1949:		V-D1	:1949
	V-F4	:1949:		V-G1	:1949
	V-G1	:1949:		V-H1	:1950
	V-H1	:1950:		V-H2	:1950
	VI-G2	:1950:		VI-G2	:1950
	VI-G3	:1950:		VI-G3	:1950
	VI-H3	:		VI-H3	:
	(Ohio)	:1949:		(Ohio)	:1949

Crops and Type-of-Farming Areas for which Cropping-Practice Data
are Available in Section 3

Appalachian, Southeast, and Mississippi Delta

Crop	Type-of-farming area	Crop: year	Crop	Type-of-farming area	Crop: year
Alfalfa:	VI-H2	1951:	Oats:	IV-F3	1949
	VI-J1	1949:		VII-H2	1951
				IX-D2	1949
Barley:	IV-F3	1949:			
	VI-J2	1950:	Peanuts:	VII-A8	1949
				IX-D2	1949
Beans, snap:				IX-D3	1949
Bush	VII-A6	1950:			
Pole	VII-A6	1950:	Potatoes:	VI-H2	1951
				VII-H2	1951
Corn, grain:	IV-F3	1949:	Soybeans:	IV-F3	1949
	VI-H2	1951:		VI-L1	
	VI-J1	1949:		(N.C.)	1949
	VI-J2			VI-L1	
	(Tenn.)	1949:		(Va.)	1949
	VI-J2			VII-A8	1949
	(Va.)	1950:		VII-H2	1951
	VI-L1			VIII-C1	1951
	(N.C.)	1949:		IX-D3	1949
	VI-L1				
	(Va.)	1949:	Strawberries:	VII-H2	1951
	VII-A6	1950:		VIII-C1	1951
	VII-A8	1949:			
	VII-H2	1951:	Sweetpotatoes:	VII-H2	1951
	VIII-C1	1951:		VIII-C1	1951
	IX-D2	1949:		IX-D2	1949
	IX-D3	1949:			
			Tomatoes:	VII-A6	1950
Cotton:	VI-H2	1951:			
	VII-A7	1947:	Wheat, winter:	IV-F3	1949
	VII-H2	1951:		VI-H2	1951
	VIII-C1	1951:		VI-J2	
				(Tenn.)	1949
				VI-J2	
Crimson clover seed:	VI-H2	1951:		(Va.)	1950
				VI-L1	
Lespedeza hay:	VI-J1	1949:		(Va.)	1949
	VII-H2	1951:			
	VIII-C1	1951:			

Continued

Crops and Type-of-Farming Areas for which Cropping-Practice Data
are Available in Section 3 - Continued

Appalachian, Southeast, and Mississippi Delta

Crop	:Type-of-:	:	Crop	:Type-of-:	:
	:farming	:Crop:		:farming	:Crop
	: area	:year:		: area	:year
Tobacco:	:	:	Tobacco: (Contd.)	:	:
Type 11.....	: VI-H ⁴	:1949:	Type 31.....	: V-C2	:1951
	:VIII-A1	:1949:		: VI-H1	:1951
	:	:		: VI-J1	:1949
Type 12(and 11 & 13):	: VII-B1	:1947:		: VI-J2	:1949
	:VIII-A1	:1947:		:VIII-C1	:
	:	:		: (Penn.)	:
Type 13.....	: VI-M1	:1949:		: (Ky.)	:1951
	:	:		:VIII-C1	:
Type 14.....	: VI-M1	:1949:		: (Purch.)	:
	: VII-C1	:1949:		: (Ky.)	:1951
	: IX-D2	:1949:		:VIII-C1	:
	:	:		: (Penn.)	:
Type 21.....	: VI-H ⁴	:1949:		: (Tenn.)	:1949
	:	:		:	:
Type 22.....	:VIII-C1	:	Type 35.....	:VIII-C1	:
	: (Penn.)	:		: (Penn.)	:
	: (Ky.)	:1951:		: (Ky.)	:1951
	:VIII-C1	:		:VIII-C1	:
	: (Penn.)	:		: (Penn.)	:
	: (Tenn.)	:1949:		: (Tenn.)	:1949
	:	:		:VIII-C1	:
Type 23.....	:VIII-C1	:		: (Purch.)	:
	: (Purch.)	:		: (Ky.)	:1951
	: (Ky.)	:1951:		:	:
	:	:	Type 36.....	: V-C2	:1951
	:	:		:	:

Crops and Type-of-Farming Areas for which Cropping-Practice Data
are Available in Section 5

Mountain and Pacific States

Crop	Type-of-farming area	Crop year	Crop	Type-of-farming area	Crop year
Alfalfa:			Barley: (Contd.)		
Irrigated	II-A3	1950:	Nonirrigated..	I-A3	1950
	II-B2	1950:		II-B2	1950
	III-E1	1952:		III-B1	1948
	VI-D1	1950:		III-C2	1950
	VI-D3	1950:		III-C3	:
	VI-D4	1950:		(Colo.)	1950
	VI-D7	:		IV-E1	1950
	(Oreg.)	1950:			:
	VI-D7	:	Beans, dry:		:
	(Wyo.)	1952:	Irrigated	I-A1	1949
	IX-F1	1950:		I-A3	1949
	IX-F2	1951:		I-A5	1950
		:		III-B1	1949
Alfalfa seed:		:		VI-D4	1950
Irrigated	VI-D7	:		VI-D5	:
	(Wyo.)	1952:		(Colo.)	1950
		:		VI-D5	:
Austrian winter peas:		:		(N.Mex.)	1950
Nonirrigated	IV-E1	1950:		VI-D7	:
		:		(N.Mex.)	1950
Barley:		:		VI-D7	:
Irrigated	I-A1	1949:		(Wyo.)	1952
	I-A5	1952:		IX-E1	1949
	II-A3	1950:		IX-F1	1949
	II-B2	1950:		IX-F1	1951
	III-C3	:		IX-F2	1951
	(Colo.)	1950:			:
	III-F1	1952:			:
	VI-D1	1950:			:
	VI-D3	1950:	Nonirrigated ..	II-B2	1950
	VI-D4	1950:		II-C3	:
	VI-D7	:		(Colo.)	1950
	(Oreg.)	1950:		II-D1	:
	VI-D7	:		(Ariz.)	1950
	(Wyo.)	1952:		IX-G1	:
	IX-F1	1950:		(N.Mex.)	1950
	IX-F2	1951:			:
		:			:

Continued

Crops and Type-of-Farming Areas for which Cropping-Practice Data
are Available in Section 5 - Continued

Mountain and Pacific States

Crop	Type-of-farming area	Crop: year:	Crop	Type-of-farming area	Crop: year
Broomcorn:			Oats:		
Nonirrigated	II-B2	:1950:	Irrigated	I-A1	:1949
				I-A5	:1952
Corn, grain:				II-A3	:1950
Irrigated	I-A1	:1949:		III-C3	:
	I-A5	:1952:		(Colo.)	:1950
	II-B2	:1950:		VI-D1	:1950
	VI-D4	:1950:		VI-D3	:1950
	IX-F2	:1951:		VI-D4	:1950
				VI-D7	:
Nonirrigated	II-B2	:1950:		(Oreg.)	:1950
				VI-D7	:
Corn, silage:				(Wyo.)	:1952
Irrigated	I-A5	:1952:		IX-F1	:1950
	II-A3	:1949:		IX-F2	:1951
	II-B2	:1950:	Nonirrigated ..	III-C2	:1950
	VI-D1	:1949:		IV-E1	:1950
	VI-D7	:	Onions:		
	(Wyo.)	:1952:	Irrigated	I-A5	:1952
	IX-F1	:1951:		VI-B1	:1950
				VI-D4	:1950
Cotton:					
Irrigated	VII-K1	:1949:	Barley, dry field:		
			Nonirrigated ..	III-B1	:1948
Flax:					
Nonirrigated	III-C2	:1950:	Potatoes:		
			Irrigated	I-A1	:1949
Grain sorghum:				I-A5	:1952
Irrigated	VI-D4	:1950:		VI-D1	:1950
				VI-D3	:1950
Nonirrigated	II-B2	:1950:		VI-D4	:1950
				VI-D7	:
				(Oreg.)	:1950
Hops:				VI-D7	:
Irrigated	I-A1	:1949:		(Wyo.)	:1952
Ladino seed:			Rice:		
Irrigated	VI-D7	:	Irrigated	I-A3	:1949
	(Oreg.)	:1950:			
			Rye:		
			Nonirrigated ..	III-C2	:1950

Continued

Crops and Type-of-Farming Areas for which Cropping-Practice Data
are Available in Section 5 - Continued

Mountain and Pacific States

Crop	Type-of-farming area	Crop::year::	Crop	Type-of-farming area	Crop::year::
Sugar beets:			Wheat: (Contd.)		
Irrigated	I-A1	1949::	Nonirrigated		
	II-B2	1950::	Cont. cropping	I-A3	1950
	VI-D1	1951::		II-B2	1950
	VI-D4	1950::		III-A4	1952
	IX-F1	1949::		III-B1	1948
	IX-F2	1951::		III-C2	1950
				III-C3	
Vetch seed, common:				(Colo.)	1950
Nonirrigated	IV-E1	1950::		IV-E1	1950
Vetch seed, hairy:			Summer fallow	II-A1	
Nonirrigated	IV-E1	1950::		(Utah)	1951
				II-B2	1950
Wheat:				II-C3	
Irrigated	I-A1	1949::		(Colo.)	1951
	I-A5	1952::		II-D1	
	II-A3	1950::		(Utah)	1951
	II-B2	1950::		III-A1	
	III-C3			(Oreg.)	1948
	(Colo.)	1950::		III-A1	
	III-E1	1952::		(Wash.	
	VI-D1	1950::		part)	1948
	VI-D1	1951::		III-A1	
	VI-D3	1950::		(Wash.	
	VI-D4	1950::		part)	1948
	VI-D5			III-A4	1952
	(Colo.)	1951::		III-B1	1948
	VI-D7			III-C2	1950
	(Oreg.)	1950::		III-C3	
	VI-D7			(Colo.)	1950
	(Wyo.)	1952::		III-C5	1951
	IX-F1	1950::		III-E1	1948
				III-E1	1949
				III-E1	1952
				III-F1	1952
				VI-D1	1950
			After corn...	III-C2	1950
			After sweet		
			clover	III-B1	1948

